UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

_		FORM 10-K		
- (Mark One)				
✗ ANNUAL REPORT	PURSUANT TO SECT	ION 13 OR 15(d) OF	THE S	ECURITIES EXCHANGE ACT OF 1934
	For the f	iscal year ended December - OR -	31, 2024	
☐ TRANSITION REPO	ORT PURSUANT TO SI	ECTION 13 OR 15(d)	OF TH	E SECURITIES EXCHANGE ACT OF
		on period from mission File Number 001-3′		
-		TransUnion		
-	(Exact name	of registrant as specified in	its char	ter)
(State o	Delaware r other jurisdiction of			61-1678417 (I.R.S. Employer
incorpoi	ration or organization) s, Chicago, Illinois			Identification No.) 60661
	principal executive offices)			(Zip Code)
	(Registrant's	312-985-2000 telephone number, includir	ıg area c	ode)
	, ,	ered Pursuant to Section		
Title of e	each class	Trading Symbol(s)		Name of each exchange on which registered
Common Stock, par	value \$0.01 per share	TRU		New York Stock Exchange
	Securities Regist	ered Pursuant to Section None	12(g) o	f the Act:
Indicate by check mark if the reg	istrant is a well-known seasoned	issuer, as defined in Rule 405	of the S	ecurities Act.
	▼ Yes	I	□ No	
Indicate by check mark if the reg	istrant is not required to file repo	orts pursuant to Section 13 or	Section 1	5(d) of the Act.
	☐ Yes		X No	
				or 15(d) of the Securities Exchange Act of 1934 during and (2) has been subject to such filing requirements for
	▼ Yes		□ No	
-	•			equired to be submitted pursuant to Rule 405 of the registrant was required to submit and post such
	▼ Yes	I	□ No	

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

X	Large accelerated filer		Accelerated filer
	Non-accelerated filer		Smaller reporting company
			Emerging growth company
If an emerging growth company, indicate by check ma revised financial accounting standards provided pursuar	2		he extended transition period for complying with any new or
,	1	_	ent's assessment of the effectiveness of its internal control ne registered public accounting firm that prepared or issued its
X			
If securities are registered pursuant to Section 12(b) of t reflect the correction of an error to previously issued fin		er the	e financial statements of the registrant included in the filing
Indicate by check mark whether any of those error corre any of the registrant's executive officers during the rele			overy analysis of incentive-based compensation received by 1-1(b).
Indicate by check mark whether the registrant is a shell	company (as defined in Rule 12b-2 of	f the 1	Act).
	Yes	X	No
The aggregate market value of the voting and non-voting 2024 (based on the closing stock price of such stock as a			the registrant was approximately \$14.4 billion as of June 28,
As of January 31, 2025, there were 195.1 million shares	s of TransUnion common stock outstar	nding	g, par value \$0.01 per share.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement of TransUnion for the Annual Meeting of Stockholders to be held May 7, 2025 are incorporated by reference to the extent specified in Part III of this Form 10-K.

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Cautionary Notice Regarding Forward-Looking Statements

This Annual Report on Form 10-K, including the exhibits hereto, contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on the current beliefs and expectations of TransUnion's management and are subject to significant risks and uncertainties. Actual results may differ materially from those described in the forward-looking statements. Any statements made in this report that are not statements of historical fact, including statements about our beliefs and expectations, are forward-looking statements. Forward-looking statements include information concerning possible or assumed future results of operations, including descriptions of our business plans and strategies. These statements often include words such as "anticipate," "expect," "guidance," "suggest," "plan," "believe," "intend," "estimate," "target," "project," "should," "could," "would," "may," "will," "forecast," "outlook," "potential," "continues," "seeks," "predicts," or the negatives of these words and other similar expressions.

Factors that could cause actual results to differ materially from those described in the forward-looking statements, or that could materially affect our financial results or such forward-looking statements include:

- macroeconomic effects and changes in market conditions, including the impact of inflation, risk of recession, and industry trends and adverse developments in the debt, consumer credit and financial services markets, including the impact on the carrying value of our assets in all of the markets where we operate;
- our ability to provide competitive services and prices;
- our ability to retain or renew existing agreements with large or long-term customers;
- our ability to maintain the security and integrity of our data;
- our ability to deliver services timely without interruption;
- our ability to maintain our access to data sources;
- government regulation and changes in the regulatory environment;
- litigation or regulatory proceedings;
- our approach to the use of artificial intelligence;
- our ability to effectively manage our costs;
- our efforts to execute our transformation plan and achieve the anticipated benefits and savings;
- our ability to maintain effective internal control over financial reporting or disclosure controls and procedures;
- economic and political stability in the United States and risks associated with the international markets where we operate;
- our ability to effectively develop and maintain strategic alliances and joint ventures;
- our ability to timely develop new services and the market's willingness to adopt our new services;
- our ability to manage and expand our operations and keep up with rapidly changing technologies;
- our ability to acquire businesses, successfully secure financing for our acquisitions, timely consummate our acquisitions, successfully integrate the operations of our acquisitions, control the costs of integrating our acquisitions and realize the intended benefits of such acquisitions;
- our ability to protect and enforce our intellectual property, trade secrets and other forms of unpatented intellectual property;
- our ability to defend our intellectual property from infringement claims by third parties;
- the ability of our outside service providers and key vendors to fulfill their obligations to us;
- further consolidation in our end-customer markets;
- the increased availability of free or inexpensive consumer information;
- losses against which we do not insure;
- our ability to make timely payments of principal and interest on our indebtedness;
- our ability to satisfy covenants in the agreements governing our indebtedness;
- our ability to maintain our liquidity;
- stock price volatility;
- share repurchase plans;
- dividend rate;
- · our reliance on key management personnel; and
- changes in tax laws or adverse outcomes resulting from examination of our tax returns.

There may be other factors, many of which are beyond our control, that may cause our actual results to differ materially from the forward-looking statements, including factors disclosed under the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this report. You should evaluate all forward-looking statements made in this report in the context of these risks and uncertainties.

The forward-looking statements contained in this report speak only as of the date of this report. We undertake no obligation to publicly release the result of any revisions to these forward-looking statements to reflect the impact of events or circumstances that may arise after the date of this report.

PART I

Unless the context indicates otherwise, any reference to the "Company," "we," "us" and "our" refers to TransUnion and its direct and indirect subsidiaries.

ITEM 1 BUSINESS

Overview

TransUnion is a leading global information and insights company that makes trust possible between businesses and consumers, helping people around the world access opportunities that can lead to a higher quality of life. That trust is built on TransUnion's ability to deliver safe, innovative solutions with credibility and consistency. We call this Information for Good.

We have built robust data and analytics assets for a large portion of the adult population in the markets we serve. We use our OneTru solution enabled platform to connect these disparate data assets and concentrate them on a single, layered and unified environment, enabling more persistent identity resolution with sharper, more contextualized insights. We use these insights, combined with our industry expertise, to develop impactful solutions to solve customers' needs, including credit risk, marketing and fraud mitigation. Because of our work, customers can better understand consumers in order to make more informed decisions, and earn consumer trust through great, personalized experiences, and the proactive extension of the right opportunities, tools and offers. In turn, we believe consumers can be confident that their data identities will result in better offers and opportunities.

Our solutions enable businesses to manage and measure credit risk, market to new and existing customers, verify consumer identities, and mitigate fraud. Businesses embed our solutions into their workflows to deliver critical insights and enable effective actions. We have deep domain expertise across a number of attractive industries, which we also refer to as verticals, including our Financial Services and Emerging Verticals, which includes Insurance, Technology, Retail and E-Commerce, Telecommunications, Media, Tenant & Employment Screening, Collections and Public Sector. Consumers use our solutions to view their credit profiles, access analytical tools that help them understand and manage their personal financial information, and take precautions against identity theft. We have a global presence in over 30 countries and territories across North America, Latin America, Europe, Africa, and Asia.

Our addressable market includes the global data and analytics market, which continues to grow as companies increasingly recognize the benefits of data and analytics-based decision making, and as consumers recognize the important role that their data identities play in their ability to procure goods and services and prevent fraud. There are several underlying trends supporting this market growth, including the proliferation of data, advances in technology such as artificial intelligence ("AI") that enable data to be processed more quickly and efficiently to provide business insights, and growing demand for these business insights across industries and geographies. Leveraging our established position as a leading provider of information and insights, we have grown our business by expanding the breadth and depth of our data, strengthening our analytics capabilities, expanding into complementary adjacent and vertical markets, deepening our solution suite in areas such as fraud mitigation and marketing, building out our geographic portfolio, investing in technology infrastructure, and enhancing our global operating model. As a result, we believe we are well positioned to expand our share within the markets we currently serve.

Our solutions are based on a foundation of data assets across financial, credit, fraud, alternative credit, identity, phone activity, digital device information, marketing, bankruptcy, lien, judgment, insurance claims, automotive and other relevant information obtained from thousands of sources including financial institutions, private databases and public records repositories. We refine, standardize and enhance this data using sophisticated algorithms to create proprietary databases. Following our acquisition of Neustar, Inc. ("Neustar") in December 2021, we recognized the opportunity to take advantage of Neustar's capabilities to enhance and complement our cloud-based technology already under development. Neustar brought us the underlying technological foundation for OneTru, which has further enhanced our ability to deliver real-time, persistent identity resolution of disparate data fragments and attributes in a privacy compliant manner. Our modernized technology infrastructure allows us to efficiently integrate data collection, identity resolution, model development, decisioning, delivery and measurement to provide better insights to customers.

We leverage our differentiated capabilities to serve a global customer base across multiple geographies and industry verticals. We offer our solutions to business customers across industries, and our customer base includes many of the largest companies in the industries we serve. We sell our solutions to leading consumer lending banks, credit card issuers, alternative lenders, online-only lenders ("FinTechs"), Point of Sale ("POS")/Buy Now Pay Later ("BNPL") lenders, auto lenders, auto insurance carriers, cable and telecom operators, retailers, media companies, and federal, state and local government agencies. We have successfully leveraged our brand, expertise and solutions to build a leading presence in several high-growth international markets. Millions of consumers across the globe also use our data to manage their personal finances and take precautions against identity theft.

We believe we have an attractive business model that has recurring and diversified revenue streams, low capital requirements, significant operating leverage and strong and stable cash flows. The proprietary and embedded nature of our solutions and the integral role that we play in our customers' decision-making processes have historically translated into high customer retention and revenue visibility. We deliver organic growth by growing our transactional volume, increasing our sales to existing customers, developing new solutions and gaining new customers. We have a diversified portfolio of businesses across the markets we serve, reducing our exposure to cyclical trends in any particular vertical, product or geography. We operate primarily on contributory data models in which we typically obtain updated information at little or no cost.

Our Evolution

We have established a track record of providing innovative solutions to businesses and consumers. Since our founding in 1968 as a provider of regional credit reporting services, we built a comprehensive and unique database of United States ("U.S.") consumer information. We also strengthened our data, analytics and technology delivery capabilities and acquired complementary businesses to enhance our solutions. Leveraging our strengths in credit risk-oriented products and identity data, we also expanded our solution sets into complementary competencies such as fraud mitigation and marketing.

Globally, we have built and acquired credit reporting agencies in new geographies, establishing strong international footholds both emerging and mature markets while expanding the verticals we serve and solutions offered in these markets. We also expanded the reach of our consumer solutions both directly and by partnering with other market leaders and innovators.

As part of our continued evolution, we invested in several strategic initiatives to better serve our customers. These initiatives include:

- Growing our Data: We continue to invest in the breadth and depth of our data. We introduced the concept of trended data to provide the trajectory of a consumer's risk profile, used public records data to enhance the scope of business issues we can address, incorporated alternative data into our databases to allow for a more comprehensive risk assessment of banked and unbanked consumers, and expanded our datasets to solve fraud mitigation and marketing use cases. We continue to improve the quality of our data, with a particular focus on foundational identity data, to provide deeper insights and create differentiated solutions for our customers.
- Expanding into New Verticals and Geographic Markets: We established and grew our presence in diversified verticals which consists of Insurance, Technology, Retail and E-Commerce, Telecommunications, Media, Tenant & Employment Screening, Collections and Public Sector. We expanded the reach of our consumer offerings by partnering with traditional and emerging providers, as well as adding identity protection and breach remediation offerings. We also diversified geographically by establishing a presence in attractive high-growth markets such as the Philippines and India, as well as investing in strategically important markets such as the United Kingdom ("U.K.") and Canada.
- **Broadening our Suite of Solutions:** From our foundation in the credit risk space, we expanded into adjacent solution areas that can leverage our datasets and competencies, most notably fraud and marketing, which can be sold across verticals. In addition, we combined related point solutions into end-to-end product suites to enable deeper penetration into customer workflows and improve retention.
- Strengthening our Analytics Capabilities: We strengthened our analytics capabilities by leveraging modern technology and differentiated data assets, utilizing more advanced tools and expanding our analytics team. This has allowed us to create solutions that produce greater insights and more predictive results. Our strengthened analytics capabilities also shortened our time-to-market to create and deliver these solutions to our customers.
- Investing in our Technology: Technology is at the core of the solutions we provide to our customers. We continue to make significant investments to evolve our technology infrastructure by leveraging both internal and external resources. Our technology modernization will fundamentally transform our technology infrastructure by implementing a global cloud-based approach to streamline product development, increase the efficiency of ongoing operations and maintenance, and enable a continuous improvement approach. We also leverage the latest data and analytics technologies, enabling us to improve speed and increase our operational efficiency. Our significant ongoing investments allow us to organize and handle high volumes of disparate data, improve delivery speeds, provide better availability, strengthen product development capabilities and continuously enhance our information security measures. Neustar bolsters our identity resolution capabilities through its OneID platform, which serves as the foundation for our global solutions enablement platform, OneTru. Our technology also allows us to build and leverage capabilities across multiple geographies and industry verticals.
- Enhancing our Global Operating Model: We continue to enhance our business processes and capabilities to support our growth. We have structured our Global Solutions organization around key capabilities such as credit, fraud, marketing, analytics, communications, consumer solutions, and others, and staffed the teams with experienced leaders to develop and diffuse configurable platform solutions across our geographies and vertical markets. Our Global

Operations organization has centralized previously disparate functions, focusing on high-volume, repeatable activities that deliver consistent and predictable outcomes at speed. Our Global Technology, Data and Analytics organization has invested to further streamline our application ecosystem and optimize to more modern and services-oriented architecture. To address our customers' needs, we hired additional industry experts, which has allowed us to create and sell new vertical-specific solutions. Our global sales force structure includes dedicated teams for our largest customers, shared sales teams for our mid-sized customers, and call center support teams for our smaller customers, which increases our sales teams' effectiveness across our target markets.

As part of our Global Operating Model, we established our award-winning Global Capability Centers ("GCCs") in 2018 to centralize, standardize and automate common work in locations with deep talent pools, which currently include India, South Africa and Costa Rica. In November 2023, our Board approved a transformation plan to optimize our operating model, which includes the transition of certain job responsibilities to our GCCs. In 2024, we transitioned additional job responsibilities to the GCCs which we expect will improve productivity, reduce costs, fund growth and optimize business processes. Our GCCs now represent approximately 42% of our global workforce supporting a wide range of functions.

We believe that our ongoing focus on evolving with the market and with our customers' needs ensures continued improvement in our overall services to businesses and consumers. Leveraging our trusted brand, global scale and strong market position in the verticals we serve will allow us to capitalize on business opportunities worldwide and contribute to our long-term growth.

Our Market Opportunity

We believe we are well-positioned to capitalize on the long-term trend of businesses and consumers using data and analytics to make more informed decisions and manage risk more effectively. As worldwide spending on data and analytics increases, we believe there are several key trends in the global macroeconomic environment affecting the geographies and industry verticals we serve that will create increasing demand for our solutions:

- Rapid Growth in Data Creation and Application: Larger and more diversified datasets are now assembled faster while the breadth of analytical applications and solutions has expanded. Companies are increasingly relying on business analytics and data technologies to help process this data in a cost-efficient manner. Non-traditional sources of data have become important in deriving alternative metrics.
- **Proliferation of Digital Commerce:** Increases in online commerce activity are creating new challenges and opportunities for businesses and consumers. Businesses seek data, analytics and insights to improve targeting precision and identity verification in these digital environments, in order to enable better consumer experiences. Additionally, consumers are seeking more frictionless digital experiences, while also facing heightened risk of of identity theft.
- Advances in Technology and Analytics Unlocking the Value of Data: Ongoing advances in data collection, storage and analytics technology, along with recent advancements in AI and machine learning contributed to the greater use and value of data and analytics in decision making. Businesses increasingly expect access to real-time data and analytics as well as solutions that fully integrate into their workflows. We believe sophisticated technology is critical for gaining and retaining business in the risk and information services industry.
- Greater Adoption of Data Solutions Across New and Existing Industry Verticals: We believe companies across industry verticals recognize the value of tailored risk information and analytical tools.
 - Financial Services: There is strong competition in the financial services space, with traditional financial services companies and consumer lenders competing against an increasing number of FinTechs and POS/BNPL lenders. FinTechs and POS/BNPL lenders provide access to credit in a fast and efficient manner by utilizing sophisticated risk assessment tools that leverage data, such as behavioral data, transactional data and employment and credit information. Traditional lenders are also increasing their use of these new solutions to grow their businesses, lower operating costs and better serve customers while addressing regulatory requirements.
 - Insurance: Consumers increasingly obtain quotes from multiple insurers in an effort to lower their costs. In
 response, insurers are seeking to improve the accuracy of their risk assessments and initial quotes. For
 example, insurance carriers use driver violation data to uncover offenses that will impact pricing earlier in the
 quoting process.
 - Other Emerging Verticals: We offer solutions in a diversified portfolio of other emerging verticals, which includes Technology, Retail and E-Commerce, Telecommunications, Media, Tenant & Employment Screening, Collections, and Public Sector. In the Technology, Retail and E-Commerce, and Telecommunications verticals we offer data-driven solutions that address the entire customer lifecycle. In the Media vertical, our highly accurate consumer data helps companies improve their marketing investments,

providing identity and audience solutions to reach the right consumers across digital channels. Our Tenant & Employment Screening vertical provides data and insights to make informed hiring, and rental decisions. In the Collections vertical, our solutions improve third-party collectors' bottom line and help provide a quality customer experience by delivering actionable consumer insights and services. Our suite of solutions in the Public Sector vertical gives government agencies the superior data assets, analytics and security they need to manage compliance and boost services for the constituents they serve.

- Increasing Lending Activity in Emerging International Markets: Credit penetration, as measured by the proportion of credit active adults, is relatively low in emerging markets, such as India. As emerging market economies develop and mature, we expect favorable socio-economic trends, such as growing middle class and a significant increase in the use of financial services by previously under-banked consumers. We expect the populations in emerging markets to continue to become more credit active, resulting in increased demand for our services.
- Increased Management and Monitoring of Personal Financial Information and Identity Protection by Consumers: We expect demand for consumer solutions to rise with the increasing availability of real-time, free credit information as well as greater consumer awareness of the importance of understanding and monitoring their credit information and protecting their identity. We believe these trends will drive growth for our consumer business.

Our Competitive Strengths

Comprehensive and Unique Datasets

Our long operating history and thought leadership in the industry have allowed us to build comprehensive and unique data assets that would be difficult for a new market entrant to replicate. Our solutions are based on a foundation of financial, credit, alternative credit, fraud, marketing, identity, bankruptcy, lien, judgment, automotive and other relevant information obtained from thousands of sources including financial institutions, private databases, public records repositories and other alternative data sources. We refine, standardize and enhance this data using sophisticated algorithms to create proprietary databases. We are constantly updating our data to keep it current, and we continue to identify opportunities to acquire additional data. We believe that our data is unique and differentiates us from our competitors. We own several proprietary datasets such as consumer credit information, driver violation history, phone activity, digital device identifiers, business data and rental payment history. Our global data assets encompass alternative data, such as the voter registry in India, a vehicle information database in South Africa and a mobile device database. We believe we are the largest provider of scale in the United States to possess both nationwide consumer credit data and comprehensive, diverse public records data, which allows us to better predict behaviors, assess risk and address a broader set of business issues for our customers.

Innovative and Differentiated Solutions

We consistently focus on innovation to develop new and enhanced solutions that meet the evolving needs of our customers. We believe our specialized data, analytics, and solutions, our collaborative approach with our customers and our ability to serve the needs of different buyers across nearly all industries differentiates us from our competitors. Our solutions are often scalable across different customers, geographies and verticals. Several examples of our innovative and differentiated solutions include:

- TruVision Trended Credit Report ("CreditVision"): We continue to enhance our credit data by including new data fields, enriching values in existing data fields and expanding account history. Our enhanced credit data has been combined with hundreds of algorithms to produce CreditVision and TruVision Blended, the market-leading trended data and alternative data solutions that provide greater granularity and evaluate consumer behavior patterns over time. This results in a more predictive view of the consumer, increases the total population of consumers who can effectively be scored, and helps consumers gain improved pricing. We continue to focus on driving CreditVision penetration globally with a distinct opportunity for growth internationally.
- Point-of-Sale / Buy Now Pay Later: TransUnion remains at the forefront of the POS/BNPL credit reporting industry.
 The POS/BNPL team delivers reporting capabilities coupled with solutions through data and insights that support POS/BNPL demand. Solutions development is complete, and we are actively operationalizing the solution with furnishers over the coming months. We continue to partner closely with key POS/BNPL market leaders and regulators.
- *TruIQ*: TruIQ solutions are a suite of data science technologies and consulting services that empower businesses with the ability to create intelligent, custom-made models and data analysis to drive better decisions and strategies. Over the past two years, we have launched two TruIQ solutions that continue to gain momentum in the market: TruIQ Analytics Studio, which provides self-service access to TransUnion's depersonalized archive credit data for portfolio valuation and risk management; and TruIQ Data Enrichment ("TDE"), which includes a proprietary linking application to connect businesses first- and third-party data with TransUnion credit data. As a result, customers can execute highly targeted marketing campaigns or conduct cost-benefit analyses when entering a new segment, without creating the risk of sensitive data leaving their private environments, relying on third-party data processors or manually linking and matching data. We are continuing to expand the TruIQ suite of solutions by enabling self-service experiences and

connecting data analytics, decisioning, and marketing use cases. Most notably, we are in the process of launching our TruIQ Advanced Acquisition solution which is a TransUnion-hosted SaaS solution suite enabling self-service, end-to-end batch prescreen campaign creation and deployment. Working across the value chain from data collection to model deployment and decision execution, TruIQ Advanced Acquisition will empower data scientists to access and link data sets, as well as manage and deploy models; credit analysts to join marketing and credit audiences, and risk-score these audiences; and marketing managers to personalize and activate pre-screen offers across channels.

- TruAudience: Our Marketing Solutions suite offers advanced depth, breadth and sophistication of the marketing identity graph, leveraging new digital identity signals, such as in-home connected devices, and new matching models/algorithms that deepen the configurability of matched outcomes, and expanding always-on points of distribution to connect to more technology and media end-points. We have continued the expansion of audience creation tools and data availability, including an expanded set of available attributes and tools available to marketers for the rapid development and deployment of highly targeted audience segments. We are also focused on development of new identity-powered solutions leveraging a common identity and data management infrastructure to resolve and enrich identity via private-safe applications in the cloud. Last year, we released Native Identity in Snowflake, establishing the foundation for cloud native product expansion. We also launched TruAudience Identity integration with AWS Entity Resolution, which will bring advanced identity resolution capabilities to AWS customers.
- *TruValidate:* Our TruValidate solutions secure trust across channels and deliver friction-right experiences that empower businesses and consumers to safely and seamlessly transact in a digital world. TruValidate provides an enhanced suite of identity management, authentication, and fraud analytics solutions that protect businesses from fraud, increase acquisition rates and consumer loyalty, and optimize business operations. We continue to invest in innovative identity and fraud device proofing and authentication services and to expand our comprehensive consumer identity graph to translate the connections between personal and digital data into consumer trust decisions across their omni-channel journey. Over the past few years, Neustar has expanded our capabilities in the fraud space and enhanced our ability to provide superior consumer identity insights and make trust possible between businesses and consumers. TruValidate Integrated Solutions, our global fraud platform, brings together fraud solutions, machine learning/AI models and delivery via a single application program interface ("API"), all built on a modernized tech stack.
- *TruLookup:* TruLookup leverages proprietary data linking and matching capabilities across thousands of data sources to identify and provide insights on relationships among specific people, assets, locations and businesses. This allows us to offer enhanced due diligence, investigation, risk management, threat assessment, identity authentication, and fraud prevention and detection solutions. Our ongoing investment in data, analytics and innovation allows us to continue to help our customers improve critical aspects of their business and to expand our value proposition to serve additional use cases and verticals such as government, law enforcement, insurance and healthcare.
- TruEmpower Dashboard ("TED"): TED is an interactive, customer-branded dashboard that empowers consumers to take control of their credit and financial health by providing them with credit information and insights, identity protection information and interactive educational tools in a comprehensive, user-friendly format. Consumers are able to easily view their credit profiles, see how they have changed over time, receive alerts on key credit and identity information changes, set goals for reaching a desired score and simulate the impact of financial decisions on those goals, understand recommended actions to attain a desired score, and receive relevant offers for financial products.
- *IdentityForce*: IdentityForce is a solution from our acquisition of Sontiq, Inc. ("Sontiq") that provides identity protection services to consumers, including credit report monitoring, dark web monitoring, identity restoration services and stolen fund disbursement, all in a flexible and user-friendly interface. Additional premium services include credit score simulators, bank monitoring, and reputation monitoring, among other features.
- TruContact Trusted Call Solutions ("TCS"): TCS is a solution suite that helps enterprises and communications providers reduce robocalling and spoofing, promote their brand, and improve call answer rates. Solutions include Caller Name Optimization, Robocall Mitigation, Certified Caller and Branded Call Display. TCS has continued to deliver outsized growth since our acquisition of Neustar. We have since launched two new Trusted Call Solutions products: Rich Call Data and Spoof Call Protection. Rich Call Data is an extension of Branded Call Display that displays a company's logo and call reason. Spoof Call Protection is a call-blocking solution designed primarily for banks.

Technology Infrastructure

We continue to evolve our infrastructure and our capabilities to efficiently meet the needs of our business and consumer customers and have expanded and evolved our enterprise approach to technology and have made strides in shifting our infrastructure to a hybrid, multi-cloud environment. Our technology infrastructure allows us to continually improve our overall services to global businesses and consumers, while also increasing throughput, improving data matching, creating efficiencies, enhancing information security and lowering operating costs. Our technology gives us the ability to process, organize and

analyze high volumes of data across multiple operating systems, databases and file types as well as to deal with both structured and unstructured data that changes frequently. We process billions of transactions on a daily basis. Because our data matching technology is able to interrelate data across disparate sources, industries and time periods, we believe that we are able to create differentiated datasets and provide our customers with comprehensive insights that allow them to better evaluate risk.

In February 2020, we announced Project Rise, a multi-phase initiative to fundamentally transform our technology infrastructure by implementing a global cloud-based approach. In November 2023, we announced our plans to leverage Neustar's technology to standardize and streamline our product delivery platforms and build a single global platform for fulfillment of our product lines.

OneDev - Hybrid Public-Private Multi Cloud Infrastructure

Using the foundations of Neustar's OneID platform, and cloud infrastructure from both Neustar and Project Rise, this new target-state architecture will consolidate disparate platforms acquired through past business acquisitions to unlock additional value from these assets. We will also reduce the number of applications that we built over the last decade of expansion and acquisitions, allowing for an enhanced security posture to meet all of our regulatory demands. By creating a single infrastructure operating system across on-premise private cloud and public cloud providers, we are creating a single control plane that will allow us to optimize our data center posture. This will allow us to drive operational efficiency through services rationalization to provide a consistent and standardized set of global services and capabilities across our technology landscape, creating capacity for product innovation. This will also improve developer experience through a unified operational control plane and self-service in the cloud and will provide a greater foundation for teams to manage their operational, security and financial risks.

OneTru - Solutions Enablement Platform

OneTru, our solutions enablement platform, will allow us to efficiently activate our assets and unlock value in a single, multilayered ecosystem. OneTru helps TransUnion create a unified approach that makes rapid innovation possible by enabling three key outcomes:

- Concentration of our expertise, allowing us to accelerate product development and deployment;
- Improvement of scale and reusability by better utilizing our configurable computing power and eliminating data exchange across platforms; and
- Increased efficiencies and reduction of total cost by bringing together disparate data and product platforms.

It also allows us to deliver a more accurate picture of consumers faster than ever before. That means more accurate identity resolution, complete and contextualized insights, and compliant use of data, all delivered through our portfolio of business and consumer products via a single implementation.

OneTru has become our centralized innovation hub. The platform standardizes key steps in transforming raw data into actionable intelligence, allowing our product specialists to focus on the last mile of customization needed to build innovative new products.

Key processes that OneTru is standardizing:

- At the data management layer, OneTru integrates our data assets in credit risk, marketing and fraud prevention into a unified environment. We embed compliance controls to separate our credit and non-credit data, with strong permissioning, providing data scientists with rapid access to our stores of proprietary and public data.
- At the identity layer, our identity graphs link and match our offline and online data together for a consistent view of consumer identity, helping customers to reliably resolve identities across product line and workflows. By participating in client workflow, we also receive a consistent feedback loop to strengthen our identity signal.
- At the analytics layer, we are utilizing common, next generation analytic tools both internally and to solve specific
 customer challenges. As new capabilities emerge including evolving tools like AI OneTru will allow us to deploy
 those capabilities rapidly and at scale.
- Finally, at the delivery layer, we are emphasizing consistent and more seamless delivery to our customers, providing easier upgrade, cross-sell and upsell cycles.

OneTru is already live and powering heritage Neustar products as well as our integrated identity graphs, our innovation labs and internal analytics environments, and new products like TruIQ Advanced Acquisition, TDE and TruValidate Integrated Solutions. We have made significant progress down a two-year path to migrate, refine and scale the platform. Over the course of 2024, we also modernized FactorTrust, our short-term lending credit bureau, to OneTru. The FactorTrust modernization serves as an end-to-end example of how OneTru can bolster our credit bureau capabilities across batch, online and analytics. In 2024 we took the foundational steps to migrate our core U.S. credit business to OneTru in 2025.

Deep and Specialized Industry Expertise

We have deep expertise in a number of attractive industry verticals including Financial Services, Insurance and other verticals. Our expertise has allowed us to develop sophisticated solutions that play an integral role in our customers' decision-making processes and are often embedded into their workflows. Our team includes industry experts with significant experience in the verticals that we target and relationships with leading companies in those verticals. We also have regulatory compliance expertise across the industries that we serve. Together, this expertise provides us with a comprehensive understanding of business trends and insights for customers in these verticals, allowing us to build solutions that cater to these customers' specific requirements. We have been able to apply our industry knowledge, data assets, technology and analytics capabilities to develop new solutions and revenue opportunities within key verticals. For example, in Financial Services, our differentiated position allowed us to anticipate the increased demand from alternative consumer lending providers, including the prevalence of POS/BNPL lending, to create solutions that cater to these emerging providers. In Insurance, we partnered with a vehicle history data provider to launch a vehicle history score that helps insurance carriers further segment risk based on the attributes of a specific automobile. In Marketing, we recognized that we already had the foundational datasets we needed to compete in audience segmentation and identity resolution, made strategic bolt-on acquisitions, and acquired Neustar to broaden our customer base and deepen our solution capabilities.

Leading Presence in Attractive International Markets

We have been operating internationally for over 30 years and have strong global brand recognition. Our strategic focus on attractive international markets spans both developed and emerging economies, resulting in a diversified global presence. We have a significant footprint in Canada, Latin America, the U.K., Africa, India and the Asia Pacific region. Our local senior management teams provide deep market insights and foster strong customer relationships. We have leveraged our brand, operating history, global footprint and technology infrastructure to establish new credit bureaus in several international markets, such as Canada in 1989, India in 2001 and the Philippines in 2011, and in 2024, we launched our credit bureau in Brazil. Once we establish a foothold in a region, our model involves expanding our service offerings within these markets and moving into adjacent emerging markets. For example, we have used our operations in Hong Kong to expand into other countries in the Asia Pacific region and to provide analytic scoring models in the Philippines, Singapore, Malaysia and Thailand. We have used our operations in South Africa to expand into neighboring African countries. We have also entered new markets through strategic acquisitions, including Brazil in 2011, Colombia in 2016, and the U.K. in 2018.

Proven and Experienced Management Team

Our senior management team has a proven track record of strong performance and significant expertise in the markets we serve, with decades of industry experience. We continue to attract and retain experienced management talent for our businesses. Our team has deep knowledge of the data and analytics sector and expertise across the various industries that we serve. Our team has overseen our expansion into new industries and geographies, while managing ongoing strategic initiatives including our significant technology investments and acquisition integrations. As a result of the sustained focus of our management team, we have been successful in consistently driving revenue and earnings growth, both organically and through acquiring and integrating businesses.

Our Growth Strategy

Enhance Underlying Data, Technology and Analytics Capabilities to Develop Innovative Solutions

As the demand for data and analytics solutions grows across industries and geographies, we will continue to expand the scope of our underlying data, including consumer identity, improve our tools and technology and enhance our analytics and technology solutions capabilities to provide innovative solutions that address this demand. With our insights and information, our customers can explore connections between people, businesses, assets and locations; identify assets, uncover inconsistencies and identify misrepresentations; and uncover evidence of financial distress.

With the unification of systems into OneTru, our solutions enablement platform, we will be able to help our customers meet their challenges more quickly and efficiently. We are also continuing to explore the use of machine learning, AI and deep learning in our data and analytics strategies.

Our continuous technology investments have also reduced the time to market for new solutions, accelerating the pace of innovation and allowing us to react quickly to customer requirements. In addition, these investments have improved and, we believe, will continue to improve efficiency, reliability, security and performance. One of our innovative, quickly enabled customer solutions is TDE, discussed further above, which enables customers to securely leverage TransUnion's dataset matching and identity linking technology in their own data infrastructure. TDE enables customers to compliantly link their sensitive first-party data to TransUnion's depersonalized consumer credit data and any additional third-party data to support contracted analytics use cases. This can all be done without requiring the customer's data to leave their environment, increasing speed to actionable insights in a privacy compliant manner.

Further Penetrate Existing Industry Verticals with Current and New Solutions

We are a leading provider of risk and information solutions in several industry verticals today, including Financial Services and the verticals within our Emerging Verticals, which consist of Insurance, Technology, Retail and E-Commerce, Telecommunications, Media, Tenant & Employment Screening, Collections, and Public Sector. We believe there is significant opportunity for further growth within these industries by expanding the number of customers to whom we sell our current solutions as well as by creating innovative new solutions that we can use to grow our presence in these industries. We focus on developing new solutions that address evolving customer needs within our industry verticals. For example, we continue to combine related point solutions into end-to-end product suites to enable deeper penetration into customer workflows and improve retention. In order to more effectively address these opportunities, we have redeployed and reallocated our sales resources to focus either on new customer opportunities or on selling additional services and solutions to existing customers. In addition, we continue to selectively increase our number of specialized sellers with deep industry expertise. With our leading market positions, existing strong relationships across our verticals and with our consumer partners, we believe we have the opportunity to further penetrate our existing customer base and capture a strong proportion of their spending across the consumer lifecycle.

Extend Into New, Adjacent Industry Verticals

In addition to increasing penetration in industries where we have a substantial presence, we continue to extend our solutions to address customer needs across a variety of attractive industries. We believe that our capabilities allow us to quickly create and deliver solutions across industries and geographies, thereby driving scalable growth based upon our foundational information and analytics. We continue to target other verticals where we see opportunities to leverage our existing capabilities, including those acquired and expanded through our recent acquisitions, as discussed below.

Extend Further Into Fraud, Marketing and Identity Solutions

From our heritage in the credit risk space, we have expanded into adjacent solution areas that can leverage our datasets and competencies, most notably Fraud, Marketing, and Identity. These solutions have broad applicability across the customers that we serve, including in key verticals such as Financial Services, Insurance, Retail and E-Commerce, Media, and Public Sector. We have broadened these capabilities through acquisitions, most notably iovation, Inc. ("iovation") in 2018 and three subsequent acquisitions in 2019 and 2020, to build out our Media vertical. In addition, our late 2021 acquisitions of Neustar and Sontiq add scale and broaden the scope of our Fraud and Marketing solutions, which are sold across verticals. Both Fraud and Marketing are critical to our expansion and diversification internationally and we have seen sizable growth in Fraud over the last few years in multiple markets, such as India.

Expand our Presence in Attractive International Markets

We believe international markets present a significant opportunity for growth. We have significant scale in some of the world's fastest growing markets, such as India and Latin America, which positions us to take advantage of the favorable dynamics in these regions as their populations become more credit active. We leverage solutions developed in the U.S. and in our regions and deploy them to international markets, after localizing them to individual market requirements. For example, after launching CreditVision in the U.S., we have expanded our offerings with similar solutions globally. In markets where we have established a presence, we are expanding further into adjacent verticals, such as Insurance and Consumer Interactive, as well as complementary solutions, such as marketing and fraud. We intend to continue to expand into new geographic markets by forming alliances with financial services institutions, industry associations and other local partners, and by pursuing strategic acquisitions. Our recent acquisitions have also helped us expand our footprint in newer geographies. Across all our international expansion initiatives, we will continue to leverage our technology infrastructure to drive speed to market, scale and differentiation.

Broaden Our Reach in Consumer Market through Direct and Indirect Channels

Our consumer business focuses on helping consumers shape their financial future and protect their identity, delivering innovative solutions to consumers both directly and indirectly through a collaborative partnership model that has expanded the market for these services, along with greater consumer awareness of the value of their credit information and increased risk of identity theft. With our acquisition of Sontiq, we added to our foundational credit monitoring solutions with a comprehensive set of identity protection offerings. Across both channels, our focus is on delivering value-added solutions and features while continuing to improve the consumer experience with more user-friendly interfaces and better customer service and educational tools. Within our indirect channel, we will continue to leverage and enhance our flexible technology platform to expand our relationship with existing partners as well as develop relationships with new partners and enter new verticals. We believe that partnerships not only enable us to grow our own business, but also expand the overall market and provide us access to new consumer segments. We will also continue to leverage our approach in the U.S. consumer market to further expand our consumer operations globally.

Pursue and Integrate Strategic Acquisitions

We have a strong track record of identifying and integrating our acquisitions and driving long-term value creation, and we will continue to maintain a disciplined approach to pursuing acquisitions. In January 2025, TransUnion announced the signing of two agreements to acquire a controlling financial interest in two businesses as follows:

- On January 15, 2025, TransUnion signed a definitive agreement to acquire majority ownership of Trans Union de Mexico, S.A., S.I.C. ("Trans Union de Mexico"), the consumer credit business of the largest credit bureau in Mexico, Buró de Crédito. TransUnion currently owns approximately 26% of Trans Union de Mexico, has held seats on its board of directors for over two decades, and serves as one of its technology providers. TransUnion has agreed to acquire an additional 68% from selling shareholders, including several of the largest banks operating in Mexico. After the transaction closes, which is expected by the end of 2025, TransUnion intends to leverage its global operating model to strengthen Trans Union de Mexico's services in the Mexican market, including additional efforts to enhance technology, operations and information security. Mexico will also be added to our long-term roadmap to align our global technology under the OneTru solutions enablement platform. Mexico is a highly complementary addition to our leading global portfolio and the successful completion of the transaction would make us the largest player in Spanish-speaking Latin America.
- On January 8, 2025, TransUnion signed a definitive agreement to acquire U.K.-based Monevo, a credit prequalification and distribution platform from Quint Group Limited. TransUnion currently owns 30% of the equity interest in Monevo, has held a seat on its board of directors since October 2021, and also has a commercial agreement in place with Monevo. We exercised a call option obtained with our initial investment to acquire the remaining 70% of the equity interest in the company. Monevo enables comparison websites and other online brands known as publishers to embed highly personalized credit offers, predominately in the U.K. and U.S. markets, through centralized technology and decisioning infrastructure which integrates lenders and publishers, allowing them to deliver better outcomes for consumers searching for credit online. The transaction is expected to close by the second quarter of 2025.

Other recent acquisitions, which we have now integrated into our operations, include the following:

- April 2022: We acquired Argus Information and Advisory Services, Inc. and Commerce Signals, Inc. (collectively, "Argus"). We leverage the data provider consortium and proprietary and differentiated benchmarking datasets of these entities to provide more enhanced and holistic solution capabilities to our customers to make better and faster decisions that will help them more fully understand consumer behavior, increase financial inclusion, acquire new accounts, and improve fraud prevention, risk management and other solutions.
- December 2021: We acquired Neustar, whose solutions combine decision analytics with real-time identity resolution services driven by its OneID platform to enable customers to build better consumer experiences. The acquisition of Neustar provided immediate scale to our identity resolution services through Neustar's large, well-established customer base. This acquisition has accelerated the growth of our identity-based solutions and has allowed us to expand our powerful digital identity capabilities through their distinctive data and analytics, enabling consumers and businesses to transact online with greater confidence.
- December 2021: We acquired Sontiq, whose solutions include identity monitoring, restoration, and response products
 and services to empower consumers and businesses to help proactively protect against identity theft and cyber threats.
 The acquisition of Sontiq enables access to an attractive new base of customers and consumers through a recurring
 subscription-based revenue model, and also complements and expands our Consumer Interactive solutions portfolio by
 providing valuable identity protection services for consumers.

Through these and many other acquisitions, we have significantly broadened our geographic footprint, increased the breadth and depth of our datasets, enhanced our services and deepened our industry expertise in our key verticals.

In addition to our acquisitions, we have also made several strategic minority investments over the years, which typically are accompanied by commercial agreements that allow us to develop, expand, and deepen relationships with innovative companies with promising technologies and capabilities. At times, our strategic investments have resulted in us acquiring controlling financial interests that we consolidate, including our initial investment in CIBIL, which is the core to our India region operations.

Segment Overview

During the first quarter of 2024, we reorganized our operations to merge our Consumer Interactive operating segment with our U.S. Markets operating segment. We manage our business and report our financial results in two reportable segments: U.S. Markets and International. We also report expenses for Corporate, which provides shared services and conducts enterprise functions. See Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," Part II, Item 8 "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 1, "Significant Accounting Polices" and Note 19, "Reportable Segments," for further information about our reportable segments.

U.S. Markets

Our U.S. Markets segment provides consumer reports, actionable insights and analytics to businesses. These businesses use our services to engage and acquire customers, assess consumer ability to pay for services, identify cross-selling opportunities, measure and manage debt portfolio risk, collect debt, verify consumer identities and mitigate fraud risk.

We deliver our solutions across multiple industry vertical markets and report disaggregated revenue as follows:

Financial Services: The Financial Services vertical consists of our Consumer Lending, Mortgage, Auto and Cards and Payments lines of business. Our Financial Services customers consist of most banks, credit unions, finance companies, auto lenders, mortgage lenders, FinTechs, and other consumer lenders in the United States. We also distribute our solutions through most major resellers, secondary market players and sales agents. Beyond traditional lenders, we work with a variety of credit arrangers, such as auto dealers and peer-to-peer lenders. We provide solutions across every aspect of the lending lifecycle; customer acquisition and engagement, fraud and ID management, retention and recovery. Our core products are focused on mitigating risk and include credit reporting, credit marketing, analytics and consulting, identity verification, and authentication and debt recovery solutions.

Emerging Verticals: Emerging Verticals include Insurance, Technology, Retail and E-Commerce, Telecommunications, Media, Tenant & Employment Screening, Collections, and Public Sector. Our solutions in these verticals are also data-driven and address the entire customer lifecycle. We offer onboarding and transaction processing products, scoring and analytic products, marketing solutions, fraud and identity management solutions and customer retention solutions, as well select market-specific solutions in Insurance and Telecommunications.

Consumer Interactive: The Consumer Interactive vertical offers solutions that help consumers manage their personal finances and take precautions against identity theft. Services in this vertical include credit reports and scores, credit monitoring, identity protection and resolution, and financial management for consumers. The vertical also provides solutions that help businesses respond to data breach events. Our products are provided through user-friendly online and mobile interfaces and are supported by educational content and customer support. With our acquisition of Sontiq, we added to our foundational credit monitoring solutions with a comprehensive set of identity protection offerings. Our Consumer Interactive vertical serves consumers directly through our own websites, as well as through channels.

Within U.S. Markets, we leverage our comprehensive data assets, data matching expertise and predictive analytics to develop solutions:

- Comprehensive Data Assets: Our credit database contains the name and address of substantially all of the U.S. creditactive population, a listing of their existing credit relationships and their timeliness in repaying debt obligations. The
 information in our database is voluntarily provided by thousands of credit-granting institutions and other data
 furnishers. We also enhance our data assets with alternative credit sources and actively seek information from courts,
 government agencies and other public records including suits, liens, judgments, bankruptcies, professional licenses,
 real property, vehicle ownership, other assets, driver violations, and contact information from certain databases. We
 continue to look for opportunities to gain access to new datasets to further enhance our proprietary datasets, including
 device-based information and phone activity data. Our databases are updated, reviewed and monitored on a regular
 basis.
- **Predictive Analytics:** Our predictive analytics capabilities allow us to analyze our proprietary datasets and provide insights to our customers to allow them to drive better business decisions. Our tools allow customers to investigate past behavior, reasonably predict the likelihood of future events and strategize actions based on those predictions. We have numerous tools such as predictive modeling and scoring, customer segmentation, marketing analytics, benchmarking, forecasting, fraud modeling and campaign optimization, all of which cater to specific customer requirements. Our predictive analytics capabilities are developed by analytics teams with deep industry experience and a broad array of specialized qualifications.

International

The International segment provides services similar to our U.S. Markets segment to businesses in select regions outside the United States. Depending on the maturity of the credit economy in each country, services may include credit reports, analytics and technology solutions services and other value-added risk management services. We also have insurance, business and automotive databases in select geographies. These services are offered to customers in a number of industries including financial services, retail credit, insurance, automotive, collections, public sector, gaming, and communications, and are delivered through both direct and indirect channels. The International segment also provides consumer solutions similar to those offered by our Consumer Interactive vertical within our U.S. Markets segment to help consumers proactively manage their personal finances and take precautions against identity theft. We report disaggregated revenue of our International segment for the following regions:

Canada: We have operated in Canada since 1989 and are one of only two nationwide consumer reporting agencies in the Canadian market. We operate across multiple verticals in Canada with leading positions in financial services, insurance and consumer interactive and a strong and growing presence in emerging verticals like FinTech and telecom. Our Canadian customer base encompasses some of the largest companies in their verticals, including a majority of the top banks, credit card issuers, insurance companies and auto manufacturer lenders.

Latin America: We have been active in Latin America since 1985 when we entered the Puerto Rican market, and now operate in numerous Central and South American countries, including a strong presence in two major markets - Colombia and Brazil. We also have significant credit bureau businesses in the Dominican Republic and Chile, and a 25.69% ownership interest in Trans Union de México, S.A., the primary credit reporting agency in Mexico. In Guatemala, we maintain a centralized database that services Guatemala, Nicaragua and Costa Rica.

U.K.: In June 2018, we entered the world's second largest credit market, the U.K., when we acquired Callcredit, the second largest consumer credit bureau in the U.K. Our U.K. business provides data, analytics and technology solutions to help businesses and consumers make informed decisions across a diverse group of industries and serves a broad set of customers including leading financial institutions and customers in other attractive, high-growth industries such as gaming, which serves online sports betting customers by offering identification and fraud and affordability solutions, FinTech and consumer interactive solutions consistent with those offered by our Consumer Interactive vertical within the U.S. Markets segment.

Africa: We launched our operations in Africa by entering South Africa in 1993 and have since expanded into many surrounding countries. We are highly diversified and serve a variety of industries through traditional consumer credit reporting services, insurance solutions, auto information solutions, and commercial credit information services. We provide risk and information solutions in Africa to many of the leading banks, retailers, auto dealer groups, and insurance companies.

India: In 2001, we partnered with prominent Indian financial institutions to create CIBIL, the first consumer and business credit reporting agency in India. We have since launched the country's first generic credit score, which is the most widely used credit score across the financial services industry in India. In the absence of a comprehensive national ID, we created an innovative matching algorithm that allowed us to create the most extensive consumer credit database in India. We also own or have access to several non-credit data sources that we use to enhance our solutions, including the national voters' registry, the confirmed and suspected fraud registry, property registry and tax ID database. We offer a suite of risk and information solutions across the credit lifecycle for banks, telecommunication companies and insurance companies, as well as consumer solutions such as online credit reports and scores. India has become our largest and our fastest growing region.

Asia Pacific: Our operations in Asia Pacific include markets such as Hong Kong, the Philippines, Thailand, and Singapore. Asia Pacific is a growing market with increasing demand for credit driven by a rising middle class that offers significant growth potential in analytics and technology solutions. We do business with many of the top financial institutions in the countries we serve. We have had a majority ownership interest in the principal consumer credit reporting company in Hong Kong since 1998. In partnership with leading credit card issuers in the Philippines, we launched the first consumer credit reporting agency in that market in 2011. We have also built credit risk scores for the National Credit Bureau of Thailand, in which we have a 12.25% ownership interest, the Credit Bureau of Singapore and the Credit Bureau of Malaysia. Our acquisitions of Argus and Neustar provided us an opportunity to grow our business footprint in the region.

Corporate

Corporate provides support services to each segment, holds investments and conducts enterprise functions. Certain costs incurred in Corporate that are not directly attributable to either of the segments remain in Corporate. These costs are typically enterprise-level costs and are primarily administrative in nature.

Markets and Customers

We have a highly diversified customer base that includes companies across multiple industries, including Financial Services and Insurance. A substantial portion of our revenue is derived from companies in the financial services industry and from sales in the United States.

We leverage our comprehensive data assets, industry expertise and our technology infrastructure, allowing us to build solutions once and deploy them multiple times across the different verticals and regions. Our evolution to a hybrid public-private cloud infrastructure augments this capability. We provide services to our customers through real-time, online delivery for services such as credit reports and predictive scores, in batch form for services that help our customers proactively acquire new customers, cross-sell to existing customers and help them monitor and manage risk, and through our software-as-a-service offerings, which include a number of solutions that help businesses interpret data, maximize reimbursements, visualize insights, predict model results and apply their customer-specific criteria to facilitate real-time automated decisions at the time of customer interaction, and through our websites to consumers, for various subscription-based and transaction-based products in the United States and in other regions we serve.

We market our services globally, primarily through our own sales force. We have dedicated sales teams for our largest customers focused by industry group and geography. These dedicated sales teams provide strategic account management and direct support to customers. We use shared sales teams to sell our services to mid-size customers. Smaller customers' sales needs are serviced primarily through call centers. We also market our services through indirect channels such as resellers, who sell directly to businesses and consumers. Our interactive direct-to-consumer services are sold primarily through our website.

Seasonality

Seasonality in the U.S. Markets segment is correlated to volumes of online credit data purchased by our financial services and mortgage customers, and our sales have generally been higher during the second and third quarters. Seasonality in our International segment is driven by local economic conditions and relevant macroeconomic market trends.

Competition

The market for our services is highly competitive. We compete primarily on the basis of differentiated solutions, datasets, analytics capabilities, ease of integration with our customers' technology, stability of services, customer relationships, innovation and price. We believe that we compete favorably in each of these categories. Our competitors vary based on the business segment, industry vertical and geographical market that our solutions address.

In our U.S. Markets segment, our competition generally includes Equifax, Experian and LexisNexis, in addition to certain competitors with whom we only compete in specific industry verticals. For example, we compete with FICO in the Financial Services vertical, with Verisk Analytics, Inc. in the Insurance vertical, and with LiveRamp and Experian in the marketing solutions space. We also compete with LifeLock as well as personal finance websites in the Consumer Interactive vertical, some of whom offer free credit information.

In our International segment, we generally compete with Equifax and Experian directly or indirectly through their subsidiaries or investments. We also compete with other companies that may focus on a particular vertical, country or region.

In addition to these competitors, we also compete with a number of other companies that may offer niche solutions catering to more specific customer requirements.

We believe the services we provide to our customers reflect our understanding of our customers' businesses, the depth and breadth of our data and the quality of our analytics and technology solutions capabilities. By integrating our services into our customers' workflows, we ensure efficiency, continuous improvement and long-lasting relationships.

Information Technology

Technology

The continuous operation of our information technology systems is fundamental to our business. Our information technology systems collect, refine, access, process, deliver and store the data that is used to provide our solutions. Our technology is at the core of our innovative solutions, and we continually invest in our technology and thought leaders to be a market leader. There are four critical elements to our global technology enablement strategy:

Hardware + Cloud: Our technology infrastructure gives us the ability to organize and handle high volumes of disparate data, maintain and improve our delivery speeds, increase availability and enhance our product development capabilities, while at the same time lowering our overall cost structure. As announced in November 2023, we are investing in our technology to standardize and streamline our product delivery platforms and build a single global solutions enablement platform, OneTru, for fulfillment of our product lines.

Our environment is built upon strategic partnerships. Our technology relies on several third-party, best-of-breed solutions as well as proprietary software and tools which we integrate into our platforms. Our control of our technology and infrastructure allows us to prioritize any changes and manage the roll-out of any upgrades or changes. We contract with various third-party providers to help us maintain and support our systems.

Software: Our market-facing solutions are designed for global deployment, such as our Brazil bureau, our first cloud-native credit bureau where we deploy best in class components. Our software is built on a common set of components, tools and practices. With the ongoing migration to OneTru, our software applications will eventually also be deployed on the same software operating platform.

Operating Model: We have established a core set of global operating principles built on common practices, community, tools and training. We have established technology Centers-of-Excellence that utilize similar tools and technology in order to provide scale and efficiency in modifying existing applications and developing new applications for our businesses. We deploy new development methodologies globally to enable rapid delivery of solutions and increase our speed-to-market. Our technology team includes both our own employees as well as additional resources from third-party providers. We hire top talent from global hubs, like India, where we are expanding our resources at all levels, including senior and executive leadership. In November 2023, we announced an operating model optimization program that has reduced our global workforce and transitioned certain job responsibilities to our GCCs, which we expect will improve productivity, save costs and fund growth, optimize business processes, and reduce our facility footprint.

Digital Associate Experience: We are also investing in our digital employee experience. We believe that to attract and retain talent we need to ensure an efficient and productive environment. We conducted a thorough needs analysis of our employees to ensure that our platforms are enabling the most effective work environment, facilitating productivity and the hybrid workspace, and providing a world-class technology foundation that enables our employees to innovate.

Data Centers and Business Continuity

In order to create redundancy and increase resiliency, we utilize a hybrid public-private cloud infrastructure in all of our major markets. We generally employ similar technologies and infrastructures at backup sites to enable the optimal sharing of technical resources across geographies.

We maintain a governance framework for business continuity that includes a written policy and procedures requiring each business unit to identify and prepare continuity plans for critical functions. Our business units have procedures in place that are designed to maintain such processes in the event of a disruption. We also have specific disaster recovery plans that will take effect if critical infrastructure or systems fail or become disabled.

As part of our business continuity program, each business unit's continuity plan is updated annually and stored in a centralized database. These plans are monitored and reviewed by our compliance team and tested annually using exercise scenarios in response to actual events. We also periodically confirm the state of preparedness of our most critical disaster recovery procedures. We maintain systems redundancy plans for our primary U.S. data centers that allow for the transfer of capacity between geographically disbursed environments in the event there is a failure of computer hardware or a loss of our primary telecommunications lines or power sources. On an enterprise basis, our systems are designed to recover most of our operational capacity in a scenario where our primary data centers become inoperable.

Security

The security and protection of personal data is TransUnion's highest priority. TransUnion's written information security program focuses on managing risk and is guided by global information security regulations and standards, including ISO/IEC 27001:2013, NIST CSF, PCI-DSS (as defined below), HIPAA (as defined below), and other international regulatory expectations in locations where we operate. Our information security program follows a risk-based approach that continuously evaluates threats, industry events and asset values to introduce enhancements when necessary. We deploy a wide range of physical and technical safeguards that are intended to provide security around the collection, storage, use, access and delivery of information we have in our possession or with our partners. These safeguards include firewalls, intrusion protection and monitoring, anti-virus and malware protection, vulnerability threat analysis, control validation, advanced persistent threat monitoring, forensic tools, encryption technologies, data transmission standards, contractual provisions, customer and partner credentialing, identity and access management, data loss prevention, access and anomaly reports and training programs for associates. We, along with other global financial services organizations, including U.S. nationwide consumer credit reporting companies, share cyber threat and attack information that may be targeted at our industry through our participation in forums such as the Financial Information Sharing and Analysis Council. These forums allow us to better understand and monitor our systems and our connectivity to our customers and partners, as well as how specific solutions that were implemented to protect against such attacks are performing. We undergo SSAE 18 and SOC2 reviews annually, and many of our major customers routinely audit our security controls. We conduct an annual Payment Card Industry Data Security Standard ("PCI-DSS") compliance program and remain PCI-DSS certified for environments that have cardholder data. We regularly engage

independent third-party organizations to evaluate TransUnion's security program to conduct independent security assessments. See Part I, Item 1C, "Cybersecurity" for additional information.

Intellectual Property and Licensing Agreements

Our intellectual property is a strategic advantage and protecting it is critical to our business. Because of the importance of our intellectual property, we treat our brand, software, technology, know-how, concepts and databases as proprietary. We attempt to protect our intellectual property rights under the trademark, copyright, patent, trade secret and other intellectual property laws of the United States and other countries, as well as through the use of licenses and contractual agreements, such as nondisclosure agreements. While we hold various patents, we do not rely primarily on patents to protect our core intellectual property. Through contractual arrangements, disclosure controls and continual associate training programs, our principal focus is to treat our key proprietary information and databases as trade secrets. Also, we have registered certain trademarks, trade names, service marks, logos, internet URLs and other marks of distinction in the United States and foreign countries, the most important of which is the trademark TransUnion name and logo. This trademark is used in connection with most of the services we sell and we believe it is a known mark in the industry.

We own proprietary software that we use to maintain our databases and to develop and deliver our services. We develop and maintain business-critical software that transforms data furnished by various sources into databases upon which our services are built. We also develop and maintain software to manage our consumer interactions, including providing disclosures and resolving disputes. In all business segments, we develop and maintain software applications that we use to deliver services to our customers, through a software-as-a-service model. In particular, we develop and maintain analytics and technology solutions infrastructure that we host and make available for our customers to develop and deploy analytics to improve business performance.

We license certain data and other intellectual property to other companies on arms-length terms that are designed to protect our rights to our intellectual property. We generally use standard licensing agreements and do not provide our intellectual property to third parties without a nondisclosure and license agreement in place.

We also license certain intellectual property that is important for our business from third parties. For example, we license creditscoring algorithms and the right to sell credit scores derived from those algorithms from third parties for a fee.

Legal and Regulatory Matters

Compliance with legal and regulatory requirements is a top priority. We are subject to numerous laws governing the collection, protection, dissemination and use of non-public personal information, credit information and other types of information. These laws are enforced by U.S. federal, state and local regulatory agencies, foreign regulatory authorities and, in some instances, through private civil litigation. Our failure to comply with applicable legal and regulatory requirements could have a negative impact on our financial condition, results of operations, reputation and overall operations.

We proactively manage our compliance with laws and regulations through a global legal, risk and compliance framework that is designed to ensure that enterprise standards are followed. Through the legal, risk and compliance functions, we provide training to our associates, monitor applicable and material laws and regulations, establish compliance policies, routinely review internal processes to determine whether business practice changes are warranted, assist in the development of new products and services, and regularly meet with principal regulators and legislators to ensure transparent engagement regarding our operations.

U.S. Data and Privacy Protection

Our U.S. operations are subject to numerous laws and regulations governing privacy, data security, consumer protection and the use of consumer credit information. Certain of these laws provide for civil and criminal penalties for the unauthorized release of, or access to, this protected information. The laws and regulations that affect our U.S. business include, but are not limited to, the following:

- Fair Credit Reporting Act ("FCRA")
 - The FCRA applies to consumer reporting agencies, including us, as well as data furnishers and users of consumer reports. The FCRA promotes the accuracy, fairness and confidentiality of information in the files of consumer reporting agencies that engage in the practice of assembling and evaluating consumer credit and other information relating to consumers for certain specified purposes. The FCRA limits what information may be reported by consumer reporting agencies, limits the distribution and use of consumer reports, establishes consumer rights to access and dispute their own credit files, includes provisions designed to prevent identity theft and assist fraud victims and victims of human trafficking, requires consumer reporting agencies to make a free annual credit report available to consumers and imposes many other requirements on consumer reporting agencies, data furnishers and users of consumer report information.
 - The Economic Growth, Regulatory Relief, and Consumer Protection Act ("EGRRCPA") amended certain parts of the FCRA to, among other things, require consumer reporting agencies to provide consumers an initial fraud alert for at least one year, establish a consumer's right to place a free national security freeze that prevents consumer reporting agencies from disclosing the content of the consumer's report to a lender, require consumer reporting agencies to provide additional credit protections and services to veterans and active-duty U.S. military consumers and mandate that consumer reporting agencies notify consumers of their right to a credit freeze and provide instructions on how to remove it.
 - Violation of the FCRA can result in civil and criminal penalties. Regulatory enforcement of the FCRA is under the purview of the Federal Trade Commission (the "FTC"), the Consumer Financial Protection Bureau (the "CFPB") and state attorneys general, acting alone or in concert with one another. Many states have their own fair credit reporting laws, which may include more exacting requirements, if not preempted by FCRA.
- The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"): The Dodd-Frank Act prohibits unfair, deceptive or abusive acts or practices ("UDAAP") with respect to consumer financial products or services and provides the CFPB with authority to enforce those provisions. The CFPB has asserted broad regulatory authority and stated that its UDAAP authority may allow it to find statutory violations even where a specific regulation does not prohibit the relevant conduct, or prior published regulatory guidance or judicial interpretation has found the activity to be in accordance with law. Many states have enacted statutes that prohibit unfair and deceptive acts and practices, relating to, among other things, marketing, disclosures, subscriptions and billing practices within the state.
- Federal Trade Commission Act (the "FTC Act"): The FTC Act prohibits unfair methods of competition and unfair or deceptive acts or practices. We must comply with the FTC Act when we market certain credit related products, such as consumer credit monitoring and identity protection services. Our data collection, use and disclosure practices and the security measures we employ to safeguard the personal data of consumers could also be subject to the FTC Act, and our data practices or our failure to safeguard data adequately may subject us to regulatory scrutiny or enforcement action.
- Gramm-Leach Bliley Act (the "GLBA"): The GLBA regulates, among other things, the receipt, use and disclosure of non-public personal information of consumers held by financial institutions, including us. Several of our datasets are subject to GLBA provisions, including limitations on the use or disclosure of the underlying data and rules relating to the technological, physical and administrative safeguarding of non-public personal information. Violation of the GLBA can result in civil and criminal liability.
- Drivers' Privacy Protection Act (the "DPPA"): The DPPA requires all states to safeguard certain personal information included in licensed drivers' motor vehicle records from improper use or disclosure. The DPPA limits the use of this information sourced from U.S. state departments of motor vehicles to certain specified purposes and does not apply if a driver has consented to the release of their data. The DPPA imposes criminal fines for non-compliance and grants individuals a private right of action, including actual and punitive damages and attorneys' fees. The DPPA provides a federal baseline of protections for individuals, and is only partially preemptive, meaning that except in a few narrow circumstances, state legislatures may pass laws to supplement the protections made by the DPPA. Many states' laws are more restrictive than the federal law.
- Data security breach laws: All states and some territories have adopted data security breach laws that may require notice be given to affected consumers in the event of a breach of personal information, and in some cases the provision

of additional benefits such as free credit monitoring to affected individuals. Some of these laws require additional data protection measures over and above the GLBA data safeguarding requirements. If data within our system is compromised, we may be subject to provisions of various state security breach laws, including regulatory investigations or enforcement actions from state attorneys general, who enforce state data breach or unfair and deceptive practices laws.

- The Credit Repair Organizations Act ("CROA"): CROA regulates companies that claim to be able to assist consumers in improving their credit standing. Some courts have applied CROA to credit monitoring services offered by consumer reporting agencies and others. CROA allows for a private right of action and permits consumers to recover all money paid for alleged "credit repair" services in the event of violation.
- The Health Insurance Portability and Accountability Act of 1996, as amended by the American Recovery and Reinvestment Act of 2009 ("HIPAA") and the Health Information Technology for Economic and Clinical Health Act ("HITECH"): HIPAA and HITECH require companies to implement reasonable safeguards to prevent intentional or unintentional misuse or wrongful disclosure of protected health information. We obtain protected health information under a "business associate" agreement that is subject to the privacy, security and transactional requirements imposed by HIPAA and HITECH. As a business associate, we are obligated to limit our use and disclosure of health-related data to certain statutorily permitted purposes, HIPAA regulations, as outlined in our business associate agreements, and to preserve the confidentiality, integrity and availability of this data. HIPAA and HITECH also require, in certain circumstances, the reporting of breaches of protected health information to affected individuals and to the United States Department of Health and Human Services. A violation of any of the terms of a business associate agreement or noncompliance with HIPAA or HITECH data privacy or security requirements could result in administrative enforcement action and/or imposition of statutory penalties by the United States Department of Health and Human Services or a state attorney general. HIPAA and HITECH requirements supplement but do not preempt state laws regulating the use and disclosure of health-related information; state law remedies, which can include a private right of action, remain available to individuals affected by an impermissible use or disclosure of health-related data.
- Comprehensive State Privacy Laws: Eight states California, Colorado, Connecticut, Montana, Oregon, Texas, Utah and Virginia have enacted comprehensive privacy legislation, currently in effect, intended to provide consumers with greater transparency and control over their personal information by providing consumers in these states with certain rights regarding their personal information and by requiring businesses to make certain disclosures and take certain other acts in furtherance of those rights. These laws exempt practices and activities regulated by the FCRA, GLBA, HIPAA and DPPA, including our credit reporting business, but apply to other portions of our business that are not regulated by these laws. An additional five states Delaware, Iowa, Nebraska, New Hampshire and New Jersey have passed similar comprehensive privacy laws, which went into effect in January 2025. Six additional states Indiana, Kentucky, Maryland, Minnesota, Rhode Island and Tennessee have passed similar laws, which will go into effect over the course of 2025 and 2026.
- Washington My Health My Data Act; Nevada Consumer Health Data Privacy Law: Washington and Nevada have enacted laws that impose broad requirements on collecting, using, and selling consumer health information. These laws took effect in 2024.
- Requirements for government contractors: Special requirements may apply to TransUnion when providing services to
 U.S. federal, state and local government agencies. For example, and without limitation, TransUnion may need to abide
 by the Privacy Act of 1974, the Internal Revenue Service's Publication 4812, and various Federal Acquisition
 Regulation and associated supplemental contract clauses. Each of these laws, regulations and contract clauses dictates
 particular measures for the protection of personal information or information that is otherwise categorized as sensitive
 by the government. Government agencies frequently modify or supplement these requirements, and consequences for
 violations of applicable requirements may include penalties, civil liability and for severe infractions, criminal liability.

We are also subject to U.S. federal and state laws that are generally applicable to any U.S. business with national or international operations, such as antitrust laws, the Foreign Corrupt Practices Act, the Americans with Disabilities Act, climate-related regulations and various employment laws. We continuously monitor U.S. federal and state legislative and regulatory activities that involve credit reporting, data privacy and security, and other relevant subjects to identify issues in order to remain in compliance with applicable laws and regulations.

International Data and Privacy Protection

We are subject to data protection, privacy and consumer credit laws and regulations in other jurisdictions where we conduct business. These laws and regulations include, but are not limited to, the following:

Canada: The Personal Information Protection and Electronic Documents Act of 2000 ("PIPEDA") and substantially
similar provincial laws govern how private sector organizations collect, use and disclose personal information in the
course of commercial activities. The PIPEDA gives individuals the right to access and request correction of their

personal information collected by such organizations. The PIPEDA requires compliance with the Canadian Standard Association Model Code for the Protection of Personal Information. Most Canadian provinces also have laws dealing with consumer reporting. These laws typically impose an obligation on credit reporting agencies to have reasonable processes in place to maintain the accuracy of the information, place limits on the disclosure of the information and give consumers the right to have access to, and challenge the accuracy of, the information. Quebec's privacy law, which went into effect over the course of 2023 and 2024, made a number of notable changes to the province's privacy laws, most notably increasing requirements on organizations seeking to transfer personal information outside of Quebec.

- Colombia: The Colombian Financial Data Protection Regime (Law 1266 of 2008) regulates the collection, use and transfer of personal data pertaining to financial services, including credit reporting. The Colombian General Data Protection Regime (Law 1581 of 2012 and Decree 1377 of 2013) covers regulation of all other personal data. Both of these regimes have applicability to credit reporting services in Colombia and together address obligations of information furnishers, database owners, consumer right of access, consumer consent and permitted information disclosures.
- European Union ("EU"): Our data management activities and the commercial solutions we make available to the European market are subject to the General Data Protection Regulation ("GDPR"). This law establishes significant data protection and privacy standards that empower European Union consumers to exercise significant control over their personal data. In addition to a litany of substantive provisions empowering consumers to limit how data may be used, GDPR also imposes operational, data processing, and other technical requirements with which we must comply. Failure to comply with any provision of GDPR could result in significant regulatory or other enforcement penalties.
- U.K.: Our U.K. operations are subject to the Data Protection Act 2018 and the Privacy and Electronic Communications Regulation (the "PECR"), which together govern the processing of personal data pertaining to U.K. citizens. Enforcement of data regulation and consumer privacy matters in the U.K. resides with the Information Commissioner's Office, an independent body set up to uphold the rights of individuals in relation to the use of their personal data. The provision of credit referencing services in the U.K. is also a regulated activity that is authorized by the Financial Conduct Authority (the "FCA"). The FCA has regulated credit reference agencies since 2014 with the objectives of protecting consumers, protecting financial markets and promoting competition. TransUnion U.K. (previously Callcredit), Experian and Equifax were granted full FCA authorization in early 2016 and are therefore all required to follow the rules and principles issued by the FCA.
 - In 2018, the FCA introduced Open Banking which aims to improve customer experience and to increase competition in the banking sector. Consumers can share transaction data with third parties via APIs to identify best products and take up multi-bank products. As part of Open Banking, the Second Payment Services Directive allows merchants to retrieve a customer's account data from their bank with their consent. The implementation of Open Banking platforms has increased the number of payment service providers available to consumers beyond traditional banks. TransUnion U.K. is an authorized information services provider under this regime.
- South Africa: The National Credit Act of 2005 (the "NCA") and its implementing regulations govern credit bureaus and consumer credit information. The NCA sets standards for filing, retaining and reporting consumer credit information. The NCA also defines consumers' rights with respect to accessing their own information and addresses the process for disputing information in a credit file. The NCA is enforced by The National Credit Regulator who has authority to supervise and examine credit bureaus. In addition, the Protection of Personal Information Act ("POPIA") went into effect on July 1, 2020, with enforcement commencing on July 1, 2021. POPIA regulates the processing of personal information of legal and juristic persons, and imposes compliance obligations and sanctions.
- *India*: The Credit Information Companies Regulation Act of 2005 requires entities that collect and maintain personal credit information to ensure that it is complete, accurate and protected. Entities must adopt certain privacy principles in relation to collecting, processing, preserving, sharing and using credit information. Data protection is currently covered under provisions of the Information Technology Act of 2000 as well as regulations promulgated by the Reserve Bank of India. On August 9, 2023, India passed The Digital Personal Data Protection Act, which covers personal information. Regulations implementing this law are forthcoming.
- Hong Kong: Personal Data (Privacy) Ordinance ("PDPO") and The Code of Practice on Consumer Credit Data regulate the operation of consumer credit reference agencies. They prescribe the methods and security controls under which credit providers and credit reference agencies may collect, access and manage credit data. The PDPO was amended in 2021 to provide new powers to the Privacy Commissioner and to make criminal the act of publicly releasing information identifying an individual or organization a practice known as "doxxing."
- *Brazil*: The Brazilian General Data Protection Law ("LGPD") went into effect on September 18, 2020. LGPD regulates the processing of personal information and imposes compliance obligations and sanctions comparable to those of GDPR. The sanctions provisions of the LGPD went into effect on August 1, 2021.

Artificial Intelligence Regulatory Framework

We use AI, machine learning, and automated decision-making technologies, including proprietary AI and machine learning algorithms and models (collectively, "AI Technologies") for both internal business and in certain product offerings, and are therefore subject to a comprehensive set of laws and regulations governing the use and development of such technologies. These laws and regulations are rapidly evolving as many states and jurisdictions introduce new laws to ensure that AI is deployed responsibly. As we continue to enhance our capabilities, these laws and regulations impose additional compliance burdens on and guide our efforts to integrate AI Technologies into our business processes. The laws and regulations that affect our AI Technologies include the following:

- U.S. Federal and State Artificial Intelligence Legislation: In the United States, legislation related to AI Technologies
 has been introduced at the federal level and is advancing at the state level, including in California, Colorado and Utah.
 Further legislation is being considered in additional states and at the federal level, illustrating the evolving regulatory
 landscape in the United States.
- EU Artificial Intelligence Act ("EU AI Act"): The EU AI Act establishes a comprehensive governance framework for AI within the European Union and applies to companies that develop, use, and/or provide AI in the EU, imposing requirements related to transparency, conformity assessments, risk management, human oversight, and security. The majority of the substantive requirements will apply beginning in August 2026.
- Intellectual Property Laws: The protection of intellectual property, particularly in the context of AI and machine learning, is governed by a complex and evolving set of laws. These laws address issues such as patent rights for AI algorithms and the protection of proprietary technologies. Jurisdictions worldwide are grappling with how to apply traditional intellectual property laws to AI innovations, leading to ongoing discussions and litigation.

Other International Laws

Credit information and credit information companies have also become subject to, directly or indirectly, further governance regulations, such as those historically reserved for banks. We are also subject to various laws and regulations generally applicable to all businesses in the other countries where we operate.

Sustainability

We are dedicated to making meaningful, positive contributions to the world and the communities we serve. We are making an impact through our commitments to enabling life-changing access to credit in mature and emerging markets, and using trended data to help consumers improve their access to credit while doing good for people and the planet.

We focus our sustainability efforts on issues that we believe are important to our business and to our key stakeholders and conduct assessments from time-to-time to help us identify and assess the relative importance of various environmental, social and governance topics to our business. We plan to report our current efforts in our upcoming 2024 Global Impact Report, which for the avoidance of doubt is not incorporated herein by reference and should not be considered part of this report.

Climate Change

Climate change continues to be a key issue for companies worldwide. In 2021, we set two targets, to achieve operational net zero scope 1 and scope 2 greenhouse gas ("GHG") emissions by 2025 and 30 percent reductions on leased real estate scope 3 emissions by 2030, using 2019 as a baseline. Currently, we consider our scope 2 GHG emissions to be those indirect emissions from our owned (as distinct from our leased) properties and leased sites within our operational control. In addition, we currently consider scope 3 GHG emissions to include leased real estate, other than leased real estate within our operational control and captured in our scope 2 GHG emissions, but our methodology may evolve in the future. We consider leased sites where TransUnion has sufficient influence over facilities to impact energy consumption and/or sourcing, as determined by an internal survey we conducted, to generally fall within operational control. Currently, we plan to achieve these reduction targets by utilizing renewable energy purchases, cloud migration, and our real estate consolidation strategy. In May 2023, TransUnion announced its partnership with Constellation Energy Corporation to support the production of new renewable energy in the United States. We anticipate that our 12-year contract with Constellation will help reduce carbon emissions associated with our energy use by more than 8,000 metric tons each year. For emissions that, in our determination, we are unable to reasonably avoid, we expect to mitigate our impact through annual carbon attribute purchases.

Human Capital Management

We employed approximately 13,400 employees as of December 31, 2024. Central to our long-term strategy is attracting, developing and retaining the best talent globally with the right skills to drive our success. Our Board of Directors (the "Board")

receives regular updates on human capital topics such as employee retention, engagement and survey results, enterprise compliance, investigations and associate health and safety.

Other than certain employees in Brazil, none of our employees are currently represented by a labor union or have terms of employment that are subject to a collective bargaining agreement. We consider our relationships with our employees to be good and have not experienced any work stoppages.

We see our people as a source of strength and know that they are essential to our mission, innovation and growth. At TransUnion, we know that being able to draw from the largest feasible pools of talent helps us find the best people for our company's needs. We strive to cultivate an exceptional workplace culture of belonging, respect and accountability, where anyone can reach their highest potential, regardless of demographic background, as we believe this is a critical component of continuing to deliver innovative products to consumers and customers.

Talent Acquisition and Retention

Our talent acquisition and retention strategy is multi-faceted. We aim to recruit the most qualified candidates and strive for a varied and well-balanced workforce.

We reward and support employees through competitive pay, benefits, and perquisite programs that allow employees and their families to thrive. Our benefit offerings are designed to meet the various and evolving needs of our workforce tailored to the businesses and geographies in which we operate.

We continue to support our employees and their families, including by providing child and adult care benefits that provide access to onsite or community centers, enhanced back-up care choices that include personal caregivers, child care and adult referral assistance and child and adult care provider discounts. In addition, we offer on-demand tutoring along with a specialist who can consult, research and provide referral services for a host of services such as child and parenting needs (e.g., pregnancy, adoption, and special needs), senior care, pets, home services, education (including college), to name a few of the many options provided to our employees. We also provide our employees with access to free mental and behavioral health resources, including on-demand access to the Employee Assistance Program for employees and their dependents. We continue to look for new ways to support our employees and their families.

Employee Engagement, Training and Development

We prioritize and invest in helping our employees grow and build their careers through several training and development programs. These include online, instructor-led and on-the-job learning formats as well as executive talent and succession planning paired with an individualized development approach.

Safety and Wellness

As TransUnion takes its efforts to maintain a safe work environment seriously, the health and well-being of associates, customers and visitors remains a top priority. We continue to follow important health and safety guidelines, and implement effective practices to minimize workplace risks.

Available Information

Through our corporate website under the heading "About - Investor Relations," at http://www.transunion.com, you can access electronic copies of our governing documents free of charge, including our Corporate Governance Guidelines and the charters of the committees of our Board. In addition, through our website, you can access the documents we file with the U.S. Securities and Exchange Commission ("SEC"), including our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and all amendments thereto, as soon as reasonably practicable after we file or furnish them. Investors and others should note that TransUnion routinely announces material information to investors and the marketplace using SEC filings, press releases, public conference calls, webcasts and the TransUnion Investor Relations website. While not all of the information that the Company posts to the TransUnion Investor Relations website is of a material nature, some information could be deemed to be material. Accordingly, the Company encourages investors, the media and others interested in TransUnion to review the information that it shares on www.transunion.com/tru. You also may request printed copies of our SEC filings or governance documents, free of charge, by writing to our corporate secretary at the address on the cover of this report. Information contained on our website is not incorporated herein by reference and should not be considered part of this report.

In addition, the SEC maintains an Internet site (www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Our corporate headquarters are located at 555 West Adams Street, Chicago, Illinois 60661, and our telephone number is (312) 985-2000.

ITEM 1A. RISK FACTORS

You should carefully consider the following risks as well as the other information included in this report, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes. Any of the following risks could materially and adversely affect our business, financial condition or results of operations. However, the selected risks described below are not the only risks facing us. Additional risks and uncertainties not currently known to us or those we currently view to be immaterial may also materially and adversely affect our business, financial condition or results of operations.

Risk Factors Summary

The following is a summary of the principal risks and uncertainties described in more detail in this report:

- Our revenues are concentrated in the U.S. financial services and consumer credit industries. When these industries or the broader financial markets experience a downturn, demand for our services and revenues may be adversely affected.
- We are subject to significant competition in the markets in which we operate, and we may face significant competition in the new markets that we plan to enter.
- To the extent the availability of free or relatively inexpensive consumer information increases, the demand for some of our services may decrease.
- Our relationships with key long-term customers may be materially diminished or terminated.
- If we are unable to develop successful new services in a timely manner, or if the market does not adopt our new services, our ability to maintain or increase our revenue could be adversely affected.
- If our outside service providers and key vendors are not able to or do not fulfill their service obligations, our
 operations could be disrupted and our operating results could be harmed.
- There may be further consolidation in our end-customer markets, which may adversely affect our revenues.
- Data security and integrity are critically important to our business, and cybersecurity incidents, including cyberattacks, breaches of security, unauthorized access to or disclosure of our intellectual property or confidential information, business disruption, or the perception that confidential information is not secure, could result in a material loss of business, regulatory enforcement, substantial legal liability and/or significant harm to our reputation.
- We may be unable to adequately anticipate, prevent or mitigate damage resulting from increasingly sophisticated methods of illegal or fraudulent activities committed against us, which could harm our business, financial condition and results of operations and could significantly harm our reputation.
- If we experience system failures, personnel disruptions or capacity constraints, or our customers do not modify their systems to accept new releases of our distribution programs, the delivery of our services to our customers could be delayed or interrupted, which could harm our business and reputation and result in the loss of revenues or customers.
- We could lose our access to data sources which could prevent us from providing our services.
- If we fail to maintain and improve our systems, our data matching technology, and our interfaces with data sources and customers, demand for our services could be adversely affected.
- The CFPB has supervisory and examination authority over our business and may initiate enforcement actions with regard to our compliance with federal consumer financial laws. Actions by the CFPB or other regulators against us or our executives could result in increased operating costs, reputational harm, payment of damages and civil money penalties, injunctive relief and/or restitution, any of which could have a material adverse effect on our business, results of operations and financial condition.
- Our business is subject to various governmental regulations, laws and orders, compliance with which may cause us to incur significant expenses or reduce the availability or effectiveness of our solutions, and the failure to comply with which could subject us to civil or criminal penalties or other liabilities.
- Regulatory oversight of our contractual relationships with certain of our customers may adversely affect our business.
- The outcome of litigation, inquiries, investigations, examinations or other legal proceedings in which we are involved, in which we may become involved, or in which our customers or competitors are involved could subject us to significant monetary damages or restrictions on our ability to do business.
- We currently use, and will continue to invest in the use of, AI Technologies, which use is subject to a continuously
 evolving regulatory landscape. The evolving regulatory landscape may impact our use of AI Technologies, require
 additional compliance measures and changes to our operations and processes, which could result in increased
 compliance costs and potential increases in civil claims against us, and could adversely affect our business, operations
 and financial condition.
- Our ability to expand our operations in, and the portion of our revenue derived from, markets outside the United States
 is subject to economic, political and other inherent risks, which could adversely impact our growth rate and financial
 performance.
- We face geopolitical and other risks associated with our international operations, which could materially adversely impact our results of operations and our financial condition.

- We may be unable to protect our intellectual property adequately or cost-effectively, which may cause us to lose market share or force us to reduce our prices. We also rely on trade secrets and other forms of unpatented intellectual property that may be difficult to protect.
- We may face claims for intellectual property infringement, which could subject us to monetary damages or limit us in using some of our technologies or providing certain services.
- When we engage in acquisitions, investments in new businesses or divestitures of existing businesses, we face risks that may adversely affect our business.
- We depend, in part, on strategic alliances, joint ventures and acquisitions to grow our business. If we are unable to
 make strategic acquisitions and develop and maintain these strategic alliances and joint ventures, our growth may be
 adversely affected.
- We have a substantial amount of debt which could adversely affect our financial position and prevent us from fulfilling our obligations under the debt instruments.
- Despite our current level of indebtedness, we may still be able to incur additional indebtedness. This could increase the risks associated with our substantial indebtedness.
- We may not be able to generate sufficient cash to service all of our indebtedness and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.
- Our inability to generate sufficient cash flow to satisfy our debt obligations, or to refinance our indebtedness on
 commercially reasonable terms or at all, would materially and adversely affect our financial position and results of
 operations and our ability to satisfy our obligations.
- Our stock price has recently been volatile, and may continue to be volatile and/or decline, regardless of our operating performance, and you may not be able to resell shares of our common stock at or above the price you paid or at all.
- Our business and operations are exposed to risks arising from developments and trends associated with climate change and other environmental and social matters, including risks associated with our own reporting or other initiatives.
- Anti-takeover provisions in our organizational documents might discourage, delay or prevent acquisition attempts for us that you might consider favorable.
- Our ability to pay cash dividends may be limited by the terms of our secured credit facility.
- There can be no assurance that we will repurchase shares pursuant to our share repurchase program consistent with historical amounts or at all.
- Economic and other conditions may adversely impact the valuation of our assets resulting in impairment charges that could have a material adverse impact on our results from operations.
- Our efforts to execute any element of our business strategy, including our transformation plan to optimize our
 operating model and invest in our technology, could experience difficulties, delays, or unexpected costs and may not
 achieve anticipated benefits and savings.
- If we fail to implement and maintain proper and effective internal controls over financial reporting, our ability to produce accurate financial statements on a timely basis could be impaired, which could cause investors to lose confidence in our reported financial information and have a negative effect on our stock price.
- Pandemics, epidemics, disease outbreaks and other public health crises, such as the COVID-19 pandemic, have disrupted our business and operations, and future public health crises could materially adversely impact our business, financial condition, liquidity and results of operations.
- We may not be able to attract and retain the skilled employees that we need to support our business.
- We are subject to losses from risks for which we do not insure.
- If we experience changes in tax laws or adverse outcomes resulting from examination of our tax returns, it could adversely affect our results of operations.

Risks Related to Our Business

Our revenues are concentrated in the U.S. financial services and consumer credit industries. When these industries or the broader financial markets experience a downturn, demand for our services and revenues may be adversely affected.

Our largest customers, and therefore our business and revenues, are influenced by macroeconomic conditions and are impacted by the availability of credit, the level and volatility of interest rates, inflation, employment levels, consumer confidence and housing demand. In addition, a significant amount of our revenue is concentrated among certain customers, industries, product offerings and in distinct geographic regions, primarily in the United States. Our 2024 revenue in our U.S. Markets Financial Services and Consumer Interactive verticals accounted for approximately 34% and 14%, respectively, of consolidated gross revenues, respectively. If businesses in these industries experience economic hardship, we cannot assure you that we will be able to generate future revenue growth. Our customer base suffers when financial markets experience volatility, liquidity issues and disruption, which has occurred in the past and which could reoccur, and the potential for increased and continuing disruptions going forward, present considerable risks to our business and revenue. Changes in the macroeconomic environment have resulted, and may continue to result, in fluctuations in volumes, pricing and operating margins for our services. In addition, if consumer demand for financial services and products and the number of credit applications decrease, the demand for our services could also be materially reduced. High inflation levels has a negative impact on our business by decreasing demand for credit due to slower consumer spending on non-essential goods and services and due to the Federal Reserve raising interest rates to combat inflation. Continued inflation and additional interest rate increases could further materially impact our business. These types of disruptions could lead to a decline in the volumes of services we provide our customers and could negatively impact our revenue and results of operations.

We are subject to significant competition in the markets in which we operate, and we may face significant competition in the new markets that we plan to enter.

The markets for our services are highly competitive, and we may not be able to compete successfully against our competitors, which could impair our ability to sell our services. We compete on the basis of differentiated solutions, datasets, analytics capabilities, ease of integration with our customers' technology, stability of services, customer relationships, innovation and price. Our regional and global competitors vary in size, financial and technical capability, and in the scope of the products and services they offer. Some of our competitors may be better positioned to develop, promote and sell their products. Larger competitors may benefit from greater cost efficiencies and may be able to win business simply based on pricing. We consistently face downward pressure on the pricing of our products, which could result in reduced prices for certain products, or a loss of market share. Our competitors may also be able to respond to opportunities before we do, by taking advantage of new technologies, changes in customer requirements or market trends.

Our Consumer Interactive vertical experiences competition from emerging companies. In the past several years, there has been an influx of other companies offering similar services to ours, free of charge. These developments have resulted in increased competition.

Many of our competitors have extensive customer relationships, including relationships with our current and potential customers. New competitors, or alliances among competitors, may emerge and gain significant market share. Existing or new competitors may develop products and services that are superior to ours or that achieve greater market acceptance. If we are unable to respond to changes in customer requirements as quickly and effectively as our competition, our ability to expand our business and sell our services may be adversely affected.

Our competitors may be able to sell services at lower prices than we do, individually or as part of integrated suites of several related services. This ability may cause our customers to purchase from our competitors rather than from us. Price reductions by our competitors could also negatively impact our operating margins or harm our ability to obtain new long-term contracts or renewals of existing contracts on favorable terms. Additionally, some of our customers may develop products of their own that replace the products they currently purchase from us, which would result in lower revenue.

We also expect that there will be significant competition in the new markets that we enter. We cannot assure you that we will be able to compete effectively against current and future competitors. If we fail to successfully compete, our business, financial condition and results of operations may be adversely affected.

To the extent the availability of free or relatively inexpensive consumer information increases, the demand for some of our services may decrease.

Public and commercial sources of free or relatively inexpensive consumer information have become increasingly available and this trend is expected to continue. Public and commercial sources of free or relatively inexpensive consumer information, including free credit information from lead generation companies and from banks, may reduce demand for our services. Beginning in April 2020, we began offering free credit reports on a weekly basis. To the extent that our customers choose not to obtain services from us and instead rely on information obtained at little or no cost from these public and commercial sources, our business, financial condition and results of operations may be adversely affected.

Our relationships with key long-term customers may be materially diminished or terminated.

We have long-standing relationships with a number of our customers, many of whom could unilaterally terminate their relationship with us or materially reduce the amount of business they conduct with us at any time. Our customer agreements relating to our core credit reporting service offered through our U.S. Markets segment are terminable upon advance written notice (typically ranging from 30 days to six months) by either us or the customer, which provides our customers with the opportunity to renegotiate their contracts with us or to award more business to our competitors.

We also provide our services to business partners who may combine them with their own or other branded services to be offered as a bundle to consumers, governmental agencies and businesses in support of fraud or credit protection, credit monitoring, identity authentication, insurance or credit underwriting, and collections. Some of these partners are the largest providers of credit information or identity protection services to the U.S. consumer market.

Market competition, business requirements, financial condition and consolidation through mergers or acquisitions, could adversely affect our ability to continue or expand our relationships with our customers and business partners. There is no guarantee that we will be able to retain or renew existing agreements, maintain relationships with any of our customers or business partners on acceptable terms or at all, or collect amounts owed to us from insolvent customers or business partners. The loss of one or more of our major customers or business partners could adversely affect our business, financial condition and results of operations.

If we are unable to develop successful new services in a timely manner, or if the market does not adopt our new services, our ability to maintain or increase our revenue could be adversely affected.

In order to keep pace with customer demands for increasingly sophisticated service offerings, to sustain expansion into growth industries and to maintain our profitability, we must continue to innovate and introduce new services to the market. The process of developing new services is complex and uncertain. Our industry solutions require extensive experience and knowledge from within the relevant industry. We must commit significant resources to this effort before knowing whether the market will accept new service offerings. Additionally, our business strategy is dependent on our ability to expand into new markets and to bring new products to market. We may not successfully enter into new markets or execute on our new services because of challenges in planning or timing, technical hurdles, difficulty in predicting market demand, changes in regulation or a lack of appropriate resources. Additionally, even if we successfully develop new products, our existing customers might not accept these new products or new markets might not adopt our products due to operational constraints, high switching costs or general lack of market readiness. Failure to successfully introduce new services to the market could adversely affect our reputation, business, financial condition and results of operations.

If our outside service providers and key vendors are not able to or do not fulfill their service obligations, our operations could be disrupted and our operating results could be harmed.

We depend on a number of service providers and key vendors such as telecommunication companies, software engineers, data processors, software and hardware vendors and providers of credit score algorithms, who are critical to our operations. These service providers and vendors are involved with our service offerings, communications and networking equipment, computer hardware and software and related support and maintenance. Although we have implemented service-level agreements and have established monitoring controls, our operations could be disrupted if we do not successfully manage relationships with our service providers, if they do not perform or are unable to perform agreed-upon service levels, or if they are unwilling to make their services available to us at reasonable prices. If our service providers and vendors do not perform their service obligations, it could adversely affect our reputation, business, financial condition and results of operations.

There may be further consolidation in our end-customer markets, which may adversely affect our revenues.

There has been, and we expect there will continue to be, merger, acquisition and consolidation activity in our customer markets. If our customers merge with, or are acquired by, other entities that are not our customers, or that use fewer of our services, our revenue may be adversely impacted. In addition, industry consolidation could affect the base of recurring transaction-based revenue if consolidated customers combine their operations under one contract, since most of our contracts provide for volume discounts. In addition, our existing customers might leave certain geographic markets, which would no longer require them to purchase certain products from us and, consequently, we would generate less revenue than we currently expect.

Risks Related to Technology and Cybersecurity

Data security and integrity are critically important to our business, and cybersecurity incidents, including cyberattacks, breaches of security, unauthorized access to or disclosure of our intellectual property or confidential information, business disruption, or the perception that confidential information is not secure, could result in a material loss of business, regulatory enforcement, substantial legal liability and/or significant harm to our reputation.

As a global consumer credit reporting agency and provider of risk and information solutions, we collect, store and transmit a large amount of sensitive and confidential consumer information on over one billion consumers, including financial

information, personally identifiable information and protected health information. As such, we rely heavily on computer systems, hardware, software and technology infrastructure for both internal and external operations that are critical to our business. We face significant and evolving cybersecurity risks that threaten the confidentiality, integrity and availability of our systems and data including unintentional events and deliberate attacks by third parties or insiders, such as the exploitation of "bugs" or security vulnerabilities in software and hardware and sophisticated attack methods such as ransomware. Cyberattacks can take many forms, but they typically have one or more of the following objectives, among others:

- obtain unauthorized access to confidential data such as personal information;
- manipulate or destroy data;
- disrupt, sabotage or degrade service on our systems; or
- affect our operations or data through attacks on third-party business partners or service providers.

We experience numerous attempts to access our computer systems, software, networks, data and other technology assets on a daily basis. We have also experienced cyberattacks and other security incidents, and expect that such attacks and incidents will continue in varying degrees in the future. To date, none of these attacks or incidents has had a material impact on our business, operations or financial results. However, there can be no assurance that future attacks will be immaterial and even immaterial incidents may adversely impact us. For example, in March 2022, a criminal third party obtained access to a TransUnion South Africa server and certain customer personally identifiable information through misuse of an authorized client's credentials. We promptly initiated our response processes, implemented technical containment measures, engaged cybersecurity and forensic experts and launched an investigation. As a precautionary measure, TransUnion South Africa temporarily took certain elements of our services offline, all of which have been resumed.

The security and protection of non-public consumer information is TransUnion's top priority. However, there can be no guarantee that the cybersecurity risk management program and processes for any company, including us and our service providers, will be fully implemented, complied with and effective at all times. We cannot assure you that our systems, databases and services will not be compromised or disrupted in the future, whether as a result of deliberate attacks by malicious actors, breaches due to employee error or malfeasance, or other disruptions during the process of upgrading or replacing computer software or hardware, power outages, computer viruses, telecommunication or utility failures, or natural disasters or other catastrophic events.

We have acquired, and may continue to acquire, companies with cybersecurity vulnerabilities and/or unsophisticated security measures, which exposes us to significant cybersecurity, operational, and financial risks. While we execute security due diligence in these transactions, it is possible that neither the acquired company nor TransUnion may identify every issue in a timely manner, which could cause impact or cyber concerns during the integration effort.

Highly publicized cybersecurity incidents have heightened consumer, legislative and regulatory awareness of cybersecurity risks. These events continue to embolden individuals or groups to target our systems more aggressively.

The preventive actions we take to address cybersecurity risk, including protection of our systems and networks, cannot sufficiently account for all threats or repel or mitigate the effects of all cyberattacks in the future as it is not always be possible to anticipate, detect or recognize all threats to our systems, or to implement comprehensive preventive measures against all cybersecurity risks. This is because, among other things:

- the techniques used in cyberattacks change frequently and are increasingly sophisticated, including due to attackers' increasing use of AI, and may not be recognized until after the attacks have succeeded;
- cyberattacks can originate from a wide variety of sources, including sophisticated threat actors involved in organized crime, sponsored by nation-states, or linked to terrorist or hacktivist organizations; or
- third parties may seek to gain access to our systems either directly or using equipment or security passwords belonging
 to employees, customers, third-party service providers or other users (such as through social engineering and phishing
 attacks).

In addition, given the nature of complex systems and services like ours, we have a large and ever-growing global attack surface comprised of numerous interconnected components, each with their own vulnerabilities and risks. While we have many security tools that we deploy across our infrastructure that actively scan our products and identify and track security vulnerabilities, we are unable to comprehensively guarantee that we can apply patches or ensure measures are in place to mitigate all such vulnerabilities before vulnerabilities can be exploited by a threat actor.

Unauthorized disclosure, loss or corruption of our data or inability of our customers to access our systems could materially disrupt our operations, subject us to substantial regulatory and legal proceedings (including class actions) and potential liability, result in a material loss of business and/or significantly harm our reputation.

We may not be able to timely address the consequences of a cybersecurity incident because a successful breach of our computer systems, software, networks or other technology assets could persist for an extended period of time before being detected due to, among other things:

- the breadth and complexity of our operations and the high volume of transactions that we process;
- the large number of customers, counterparties and third-party service providers with which we do business;
- the proliferation and increasing sophistication of cyberattacks;
- the possibility that a malicious third party compromises the software, hardware or services that we procure from a service provider unbeknownst to both the provider and to TransUnion; or
- the possibility that a third party, after establishing a foothold on an internal network without being detected, might obtain access to other networks and systems.

The extent of a particular cybersecurity incident and the steps that we may need to take to investigate it may not be immediately clear, and it may take a significant amount of time before such an investigation can be completed and full and reliable information about the incident is known. While such an investigation is ongoing, we may not necessarily know the extent of the harm or how best to remediate it, and certain errors or actions could be repeated or compounded before they are discovered and remediated, any or all of which could further increase the costs and consequences of a cybersecurity incident.

Due to concerns about data security and integrity, a growing number of legislative and regulatory bodies around the world have adopted consumer notification and other requirements in the event that consumer information is accessed by unauthorized persons and additional regulations regarding the use, access, accuracy and security of such data are possible. For example, in the United States, we are subject to federal and state laws that provide for more than 50 disparate notification regimes, some of which also provide for statutory damages and private rights of action for plaintiffs who experience certain types of data breaches. In the event of unauthorized access, our failure to comply with the complexities of these various regulations could subject us to regulatory scrutiny and additional liability.

We may be unable to adequately anticipate, prevent or mitigate damage resulting from increasingly sophisticated methods of illegal or fraudulent activities committed against us, which could harm our business, financial condition and results of operations and could significantly harm our reputation.

The defensive measures that we take to manage threats, especially cyber-related threats, to our business may not adequately anticipate, prevent or mitigate harm we may suffer from such threats. Criminals use evolving and increasingly sophisticated methods of perpetrating illegal and fraudulent activities. For example, in September 2020, TransUnion experienced a series of Distributed Denial of Service ("DDoS") attacks. While these attacks did not result in any unauthorized access to data or systems, there was disruption to TransUnion's normal operations including degraded customer response time, intermittent timeouts and degraded internal information technology services utilized by TransUnion associates. TransUnion deploys a number of defensive measures to mitigate DDoS attacks, but persistent attackers can challenge these protections.

Fraudulent activities committed against us could disrupt our operations, have an adverse effect on our financial results, subject us to substantial legal proceedings and potential liability, result in a material loss of business and/or significantly harm our reputation.

If we experience system failures, personnel disruptions or capacity constraints, or our customers do not modify their systems to accept new releases of our distribution programs, the delivery of our services to our customers could be delayed or interrupted, which could harm our business and reputation and result in the loss of revenues or customers.

Our ability to provide reliable service largely depends on our ability to maintain the efficient and uninterrupted operation of our computer network, systems and data centers, some of which have been outsourced to third-party providers. In addition, we generate a significant amount of our revenues through channels that are dependent on links to telecommunications providers. Our systems, personnel and operations could be exposed to damage or interruption from fire, natural disasters, pandemic illness, power loss, war, terrorist acts, civil disobedience, telecommunication failures, computer viruses, DDoS attacks or human error. We may not have sufficient redundant operations to cover a loss or failure of our systems in a timely manner. Any significant interruption could severely harm our business and reputation and result in a loss of revenue and customers. Additionally, from time to time we send our customers new releases of our distribution programs, some of which contain security updates. Any failure by our customers to install these new releases could expose our customers to computer security risks.

We could lose our access to data sources which could prevent us from providing our services.

Our services and products depend extensively upon continued access to and receipt of data from external sources, including data received from customers, strategic partners and various government and public records repositories. In some cases, we

compete with our data providers. Our data providers could stop providing data, provide untimely data or increase the costs for their data for a variety of reasons, including a perception that our systems are insecure as a result of a data security incidents, budgetary constraints, a desire to generate additional revenue or for regulatory or competitive reasons. We could also become subject to increased legislative, regulatory or judicial restrictions or mandates on the collection, disclosure or use of such data, in particular if such data is not collected by our providers in a way that allows us to legally use the data. If we were to lose access to this external data or if our access or use were restricted or were to become less economical or desirable, our ability to provide services could be negatively impacted, which would adversely affect our reputation, business, financial condition and results of operations. We cannot provide assurance that we will be successful in maintaining our relationships with these external data source providers or that we will be able to continue to obtain data from them on acceptable terms or at all. Furthermore, we cannot provide assurance that we will be able to obtain data from alternative sources if our current sources become unavailable.

If we fail to maintain and improve our systems, our data matching technology, and our interfaces with data sources and customers, demand for our services could be adversely affected.

In our markets, there are continuous improvements in computer hardware, network operating systems, programming tools, programming languages, operating systems, data matching, data filtering and other database technologies and the use of the internet. These improvements, as well as changes in customer preferences or regulatory requirements, may require changes in the technology used to gather and process our data and deliver our services. Our future success will depend, in part, upon our ability to:

- internally develop and implement new and competitive technologies;
- use leading third-party technologies effectively;
- respond to changing customer needs and regulatory requirements, including being able to bring our new products to the market quickly; and
- transition customers and data sources successfully to new interfaces or other technologies.

We cannot provide assurance that we will successfully implement new technologies, cause customers or data furnishers to implement compatible technologies or adapt our technology to evolving customer, regulatory and competitive requirements. If we fail to respond, or fail to cause our customers or data furnishers to respond, to changes in technology, regulatory requirements or customer preferences, the demand for our services, the delivery of our services or our market reputation could be adversely affected. Additionally, our failure to implement important updates could affect our ability to successfully meet the timeline for us to generate cost savings resulting from our investments in improved technology. Failure to achieve any of these objectives would impede our ability to deliver strong financial results.

Risks Related to Laws, Regulations and Government Oversight

The CFPB has supervisory and examination authority over our business and may initiate enforcement actions with regard to our compliance with federal consumer financial laws. Actions by the CFPB or other regulators against us or our executives could result in increased operating costs, reputational harm, payment of damages and civil money penalties, injunctive relief and/or restitution, any of which could have a material adverse effect on our business, results of operations and financial condition.

The CFPB has broad authority over our business. This includes authority to issue regulations under federal consumer financial protection laws, such as under FCRA and other laws applicable to us and our financial customers. The CFPB is authorized to prevent "unfair, deceptive or abusive acts or practices" through its regulatory, supervisory and enforcement authority.

The CFPB conducts examinations and investigations, and may issue subpoenas and bring civil actions in federal court for violations of the federal consumer financial laws including FCRA. In these proceedings, the CFPB can seek relief that includes: rescission or reformation of contracts, restitution, disgorgement of profits, payment of damages, limits on activities and civil money penalties of up to \$1.0 million per day for knowing violations. The CFPB conducts periodic examinations of us and the consumer credit reporting industry, which could result in new regulations or enforcement actions or proceedings. Actions by the CFPB could result in requirements to alter or cease offering affected products and services, making them less attractive and restricting our ability to offer them.

For example, in January 2017, as part of a Consent Order entered into with the CFPB, we agreed among other things, to implement certain practice changes in the way we advertise, market and sell products and services offered directly to consumers. In June 2021, we received a Notice and Opportunity to Respond and Advise ("NORA") letter from the CFPB, alleging that we failed to comply with and timely implement the January 2017 Consent Order (the "2017 Consent Order"), and further alleging additional violations related to TransUnion Interactive, Inc.'s marketing practices. On April 12, 2022, after failed settlement negotiations with the CFPB related to the matter, the CFPB filed a lawsuit against us, Trans Union LLC, TransUnion Interactive, Inc. (collectively, the "TU Entities") and the former President of our Consumer Interactive business, John Danaher, seeking restitution, civil money penalties, and injunctive relief, among other remedies, and alleging that the TU

Entities violated the 2017 Consent Order and engaged in deceptive acts and practices in marketing the TransUnion Credit Monitoring product, among other allegations. The CFPB further alleges that Mr. Danaher violated the 2017 Consent Order and that we and Trans Union LLC provided substantial assistance to TransUnion Interactive, Inc. in violating the 2017 Consent Order and the law. On February 5, 2025, the Court issued a stay in the proceedings at the CFPB's request. As of December 31, 2024, we have an accrued liability of \$56.0 million in connection with this matter and there is a reasonable possibility that a loss in excess of the amount accrued may be incurred, and such an outcome could have a material adverse effect on our results of operations and financial condition.

In March 2024, we received a NORA letter from the CFPB, informing us that the CFPB's Enforcement Division was considering whether to recommend that the CFPB take legal action against us related to our dispute handling practices and procedures. The NORA letter alleged that Trans Union LLC violated FCRA's requirements to conduct a reasonable reinvestigation of disputed information and follow reasonable procedures to assure maximum possible accuracy of the information in consumer reports, and the Consumer Financial Protection Act's prohibition of unfair, deceptive, and abusive acts or practices. On July 12, 2024, the CFPB Enforcement Division advised us that it had obtained authority to pursue an enforcement action against us seeking specific injunctive relief provisions and civil money penalties. Since that time, we have been engaged in active discussions with the CFPB regarding this matter, including that our ability to make proposed changes to certain dispute handling processes is dependent on the participation of other consumer reporting agencies, data furnishers and industry participants. Given recent changes in CFPB leadership, our engagement with the agency on this matter has paused. We cannot provide an estimate of when, or if, such engagement will resume. We further cannot provide assurance that the CFPB will not ultimately commence a lawsuit against us in this matter, nor are we able to predict the likely outcome of this matter, which could have a material adverse effect on our results of operations and financial condition. We are not able to reasonably estimate our potential loss or range of loss related to this matter.

See Part II, Item 8, "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 21, "Contingencies" for information regarding the CFPB matter.

Additionally, in March 2022, we received a NORA letter from the CFPB, alleging that our Tenant and Employment screening business, TransUnion Rental Screening Solutions, Inc. and Trans Union LLC violated the FCRA by failing to (i) follow reasonable procedures to assure maximum possible accuracy of information in consumer reports and (ii) disclose to consumers the sources of such information. On July 27, 2022, the CFPB's Enforcement Division advised us that it had obtained authority to pursue an enforcement action jointly with the FTC. On October 5, 2023, we reached a settlement in the form of a Consent Order with the CFPB and the FTC regarding this matter, pursuant to which we agreed to pay \$11.0 million in redress and \$4.0 million in civil money penalties, which has been paid in full, and agreed to implement certain business process changes.

In August 2022, the TU Entities received a NORA letter from the CFPB, informing us that the CFPB's Enforcement Division was considering whether to recommend that the CFPB take legal action against us following an investigation relating to potential violations of law related to the placement and lifting of security freezes resulting from certain system issues. We have corrected associated system issues and have processes in place to monitor and address issues going forward. On April 14, 2023, the CFPB's Enforcement Division advised us that it had obtained authority to pursue an enforcement action. On October 10, 2023, we reached a settlement in the form of a Consent Order with the CFPB regarding this matter, pursuant to which we agreed to pay \$3.0 million in redress and \$5.0 million in civil penalties, which settlement has been paid in full.

Recently, the consumer reporting industry has been subject to heightened scrutiny. If this trend continues, it could result in more regulatory and legislative scrutiny of the practices of our industry and additional regulatory enforcement actions and litigation, which could adversely affect our business and results of operations.

Our compliance costs and legal and regulatory exposure could increase materially if we are targeted by the CFPB for additional enforcement actions, or if the CFPB or other federal, state or local regulators enact new regulations, change regulations that were previously adopted, modify through supervision or enforcement past regulatory guidance, or interpret existing regulations in a manner different or stricter than have been previously interpreted. For example, the CFPB recently issued guidance that indicates increased focus on consumer reporting agencies' compliance with the accuracy and dispute obligations under FCRA with respect to rental information. Although we have committed resources to enhancing our risk and compliance programs, actions by the CFPB or other regulators against us or our current or former executives could result in increased operating costs, reputational harm, payment of damages and civil monetary penalties, injunctive relief and/or restitution, any of which could have a material adverse effect on our business, results of operations and financial condition.

Our business is subject to various governmental regulations, laws and orders, compliance with which may cause us to incur significant expenses or reduce the availability or effectiveness of our solutions, and the failure to comply with which could subject us to civil or criminal penalties or other liabilities.

Our businesses are subject to regulation under the FCRA, the GLBA, the DPPA, HIPAA, HITECH, the Dodd-Frank Act, the FTC Act and various other international, federal, state and local laws and regulations. See "Business-Legal and Regulatory Matters" for a description of select regulatory regimes to which we are subject. These laws and regulations, which generally are

designed to protect the privacy of the public and to prevent the misuse of personal information available in the marketplace, are complex, change frequently and have tended to become more stringent over time. We already incur significant expenses to ensure compliance with these laws.

Currently, public concern is high with regard to the operation of consumer reporting agencies in the United States, as well as the collection, use, accuracy, correction and sharing of personal information, including Social Security numbers, dates of birth, financial information, medical information, department of motor vehicle data and other personal data.

In addition, many consumer advocates, privacy advocates, legislatures and government regulators believe that existing laws and regulations do not adequately protect privacy and have become increasingly concerned with the collection and use of this type of personal information. As a result, nineteen U.S. states have passed comprehensive privacy legislation intended to provide consumers with greater transparency and control over their personal information by providing consumers with certain rights, such as the right to know what personal information is being collected about them, and the right to access, delete, correct, or opt out of the sale of their personal information. The original California Consumer Privacy Act became effective in 2020, with amendments in the California Privacy Rights Act effective in 2023. Similar laws in Colorado, Connecticut, Utah and Virginia became effective over the course of 2023. Similar laws in Montana, Oregon and Texas became effective over the course of 2024. Similar laws in Delaware, Iowa, Nebraska, New Hampshire and New Jersey became effective in January 2025. Similar laws in Indiana, Kentucky, Maryland, Minnesota, Rhode Island and Tennessee will take effect over the course of 2025 to 2026. While these laws include specific exemptions for practices and activities regulated by the FCRA, the GLBA, HIPAA and the DPPA, including our credit reporting business, they apply to other portions of our business that are not regulated by these laws.

Public concern regarding identity theft also has led to more transparency for consumers as to what is in their credit reports. We provide credit reports and scores and monitoring services to consumers for a fee, and this income stream could be reduced or restricted by legislation that requires us to provide these services to consumers free of charge. For example, under U.S. federal law today, we are required to provide consumers with one credit report per year free of charge, and beginning in April 2020, we began offering consumers free weekly credit reports.

The following legal and regulatory developments also could have a material adverse effect on our business, financial condition or results of operations:

- amendment, enactment or interpretation of laws and regulations that restrict the access and use of personal information and reduce the availability or effectiveness of our solutions or the supply of data available to customers;
- changes in governmental, cultural and consumer attitudes in favor of further restrictions on information collection and sharing, which may lead to regulations that prevent full utilization of our solutions;
- failure of data suppliers or customers to comply with laws or regulations, where mutual compliance is required;
- failure of our solutions to comply with current laws and regulations; and
- failure of our solutions to adapt to changes in the regulatory environment in an efficient, cost-effective manner.

Changes in applicable legislation or regulations that restrict or dictate how we collect, maintain, combine and disseminate information, or that require us to provide services to consumers or a segment of consumers without charge, could adversely affect our business, financial condition or results of operations. Evolutions in consumer finance regulatory requirements or market practices involving our customers also might negatively affect our businesses and the markets into which we sell. For instance, the Federal Housing Finance Agency and various government sponsored entities continue to evaluate permitting mortgage originators to underwrite loans using only two credit reports, rather than the current mandate to use a credit report from each of the three national consumer reporting agencies. In the future, we may be subject to significant additional expense to ensure continued compliance with applicable laws and regulations and to investigate, defend or remedy actual or alleged violations. Any failure by us to comply with applicable laws or regulations could also result in significant liability to us, including liability to private plaintiffs as a result of individual or class action litigation, or may result in the cessation of our operations or portions of our operations or impositions of fines and restrictions on our ability to carry on or expand our operations. Moreover, our compliance with privacy laws and regulations and our reputation depend in part on our customers' adherence to privacy laws and regulations and their use of our services in ways consistent with consumer expectations and regulatory requirements. Certain of the laws and regulations governing our business are subject to interpretation by judges, juries and administrative entities, creating substantial uncertainty for our business. We cannot predict what effect the interpretation of existing or new laws or regulations may have on our business. See "Business-Legal and Regulatory Matters."

Regulatory oversight of our contractual relationships with certain of our customers may adversely affect our business.

The Office of the Comptroller of the Currency's (the "OCC") guidance to national banks and federal savings associations on assessing and managing risks associated with third-party relationships, which include all business arrangements between a bank and another entity, by contract or otherwise, requires banks to exercise comprehensive oversight throughout each phase of a bank's business arrangement with third-party service providers, and instructs banks to adopt risk management processes commensurate with the level of risk and complexity of its third-party relationships. The OCC expects especially rigorous

oversight of third-party relationships that involve certain "critical activities," which include significant bank functions or significant shared services or other activities that could have a major impact on a bank's operations. In light of this guidance, our existing or potential financial services customers subject to OCC regulation may continue to revise their third-party risk management policies and processes and the terms on which they do business with us, which may adversely affect our relationship with such customers.

The outcome of litigation, inquiries, investigations, examinations or other legal proceedings in which we are involved, in which we may become involved, or in which our customers or competitors are involved could subject us to significant monetary damages or restrictions on our ability to do business.

Legal proceedings arise frequently as part of the normal course of our business. These may include individual consumer cases, class action lawsuits and inquiries, investigations, examinations, regulatory proceedings or other actions brought by federal or state authorities or by consumers. The scope and outcome of these proceedings is often difficult to assess or quantify. Plaintiffs in lawsuits may seek recovery of large amounts and the cost to defend such litigation may be significant. There may also be adverse publicity and uncertainty associated with investigations, litigation and orders (whether pertaining to us, our customers or our competitors) that could decrease customer acceptance of our services or result in material discovery expenses. In addition, a court-ordered injunction or an administrative cease-and-desist order or settlement may require us to modify our business practices or may prohibit conduct that would otherwise be legal and in which our competitors may engage. Many of the technical and complex statutes to which we are subject, including state and federal credit reporting, medical privacy and financial privacy requirements, may provide for civil and criminal penalties and may permit consumers to maintain individual or class action lawsuits against us and obtain statutorily prescribed damages. Additionally, our customers might face similar proceedings, actions or inquiries, which could affect their business and, in turn, our ability to do business with those customers. While we do not believe that the outcome of any pending or threatened legal proceeding, investigation, examination or supervisory activity will have a material adverse effect on our financial position, such events are inherently uncertain and adverse outcomes could result in significant monetary damages, penalties or injunctive relief against us.

See Part II, Item 8, "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 21, "Contingencies" for information regarding our legal proceedings.

We currently use, and will continue to invest in the use of, AI Technologies, which use is subject to a continuously evolving regulatory landscape. The evolving regulatory landscape may impact our use of AI Technologies, require additional compliance measures and changes to our operations and processes, which could result in increased compliance costs and potential increases in civil claims against us, and could adversely affect our business, operations and financial condition.

We use AI Technologies throughout our business, and are making, and will continue to make, significant investments in this area. For example, we use AI Technologies to build, enhance and analyze predictive and prescriptive models for specific customers and to automate and improve the efficiency of our business internally. Additionally, the regulatory framework for AI Technologies is rapidly evolving as many federal, state and foreign government bodies and agencies have introduced or are currently considering additional laws and regulations.

In the United States, legislation related to AI Technologies has been introduced at the federal level and is advancing at the state level. For example, the California Privacy Protection Agency is currently finalizing regulations under the California Consumer Privacy Act regarding the use of automated decision-making. California also enacted 17 new laws in 2024 that further regulate use of AI Technologies and provide consumers with additional protections around companies' use of AI Technologies, such as requiring companies to disclose certain uses of generative AI. Other states have also passed AI-focused legislation, such as Colorado's Artificial Intelligence Act, which will require developers and deployers of "high-risk" AI systems to implement certain safeguards against algorithmic discrimination, and Utah's Artificial Intelligence Policy Act, which establishes disclosure requirements and accountability measures for the use of generative AI in certain consumer interactions.

In Europe, on August 1, 2024, the EU AI Act came into effect, establishing a comprehensive, risk-based governance framework for AI in the EU market. The majority of the substantive requirements will apply beginning in August 2026. The EU AI Act applies to companies that develop, use and/or provide AI in the EU and—depending on the AI use case—includes requirements around transparency, conformity assessments and monitoring, risk assessments, human oversight, security, accuracy, general purpose AI and foundation models, and fines for breach.

It is also possible that further new laws and regulations will be adopted in the United States and in other non-U.S. jurisdictions, or that existing laws and regulations, including competition and antitrust laws, may be interpreted in ways that would limit our ability to use AI Technologies for our business, or require us to change the way we use AI Technologies in a manner that negatively affects the performance of our products, services, and business and the way in which we use AI Technologies.

We have a comprehensive AI risk management framework that includes governance standards, risk assessments, and compliance measures designed to mitigate potential adverse consequences from AI Technologies. However, implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet completely

determine the impact future laws, regulations, standards, or market perception of their requirements may have on our business and may not always be able to anticipate how to respond to these laws or regulations. As such, these laws and regulations may affect our use of AI Technologies and our ability to provide, improve or commercialize our services, require additional compliance measures and changes to our operations and processes, result in increased compliance costs and potential increases in civil claims against us, and could adversely affect our business, operations and financial condition.

Risks Related to Global Operations

Our ability to expand our operations in, and the portion of our revenue derived from, markets outside the United States is subject to economic, political and other inherent risks, which could adversely impact our growth rate and financial performance.

Over the last several years, we have derived a growing portion of our revenues from customers outside the United States, and it is our intent to continue to expand our international operations, including our recently announced planned acquisition in Mexico. We have sales and technical support personnel in numerous countries worldwide. We expect to continue to add personnel internationally to expand our abilities to deliver differentiated services to our international customers. Expansion into international markets will require significant resources and management attention and will subject us to new regulatory, economic and political risks. Moreover, the services we offer in developed and emerging markets must match our customers' demand for those services. Due to price, limited purchasing power and differences in the development of consumer credit markets, there can be no assurance that our services will be accepted in any particular developed or emerging market, and we cannot be sure that our international expansion efforts will be successful. The results of our operations and our growth rate could be adversely affected by a variety of factors arising out of international commerce, some of which are beyond our control. These factors include:

- currency exchange rate fluctuations;
- foreign exchange controls that might prevent us from repatriating cash to the United States;
- difficulties in managing and staffing international offices;
- increased travel, infrastructure, legal and compliance costs of multiple international locations;
- foreign laws and regulatory requirements;
- terrorist activity, natural disasters and other catastrophic events;
- · restrictions on the import and export of technologies;
- difficulties in enforcing contracts and collecting accounts receivable;
- longer payment cycles;
- failure to meet quality standards for outsourced work;
- unfavorable tax rules;
- political and economic conditions in foreign countries, particularly in emerging markets;
- the presence and acceptance of varying level of business corruption in international markets;
- varying business practices in foreign countries; and
- reduced protection for intellectual property rights.

For example, in 2024, reported revenue from our International segment increased 10.7% including the impact of foreign currencies, or 11.7% on a constant currency basis which excludes the impact of foreign currencies. See "Management's Discussion and Analysis of Financial Condition and Results of Operations-Years Ended December 31, 2024, 2023 and 2022-Revenue-International Segment." As we continue to expand our business, our success will partially depend on our ability to anticipate and effectively manage these and other risks. Our failure to manage these risks could adversely affect our business, financial condition and results of operations.

We face geopolitical and other risks associated with our international operations, which could materially adversely impact our results of operations and our financial condition.

We conduct operations in over 30 countries and, in the fiscal year ended December 31, 2024, approximately 22.8% of our revenue was derived from our international operations, which subjects us to various risks inherent in global operations. We may conduct business in additional foreign jurisdictions in the future, which may carry operational risks. At any particular time, our global operations may be affected by local changes in laws, regulations, and political and economic environments, including inflation, recession, currency volatility, and competition, as well as business and operational decisions made by joint venture partners.

Furthermore, geopolitical dynamics caused by political, economic, social or other conditions in foreign countries and regions may impact our business and results of operations. Significantly higher and sustained rates of inflation, with subsequent

increases in operational costs, could have a material adverse effect on our business, financial position and results of operations. The continued threat of terrorism and heightened security and military action in response thereto, or any other current or future acts of terrorism, war and other events (such as economic sanctions and trade restrictions) may cause further disruptions to the economies of the United States and other countries and create further uncertainties or could otherwise negatively impact our business, operating results, and financial condition.

Changes or uncertainty in U.S. policies or policies in other countries and regions in which we do business, including any changes or uncertainty with respect to U.S. or international trade policies or tariffs, also can disrupt our global operations, as well as our customers and suppliers, in a particular location and may require us to spend more money to source certain products or materials that we purchase. Any of these factors could adversely affect our business, financial position, and results of operations.

Risks Related to Intellectual Property

We may be unable to protect our intellectual property adequately or cost-effectively, which may cause us to lose market share or force us to reduce our prices. We also rely on trade secrets and other forms of unpatented intellectual property that may be difficult to protect.

Our success depends, in part, on our ability to protect and preserve the proprietary aspects of our technology and services. If we are unable to protect our intellectual property, including trade secrets and other unpatented intellectual property, our competitors could use our intellectual property to market and deliver similar services, decreasing the demand for our services. We rely on the patent, copyright, trademark, trade secret and other intellectual property laws of the United States and other countries, as well as contractual restrictions, such as nondisclosure agreements, to protect and control access to our proprietary intellectual property. These measures afford limited protection, however, and may be inadequate. We may be unable to prevent third parties from using our proprietary assets without our authorization or from breaching any contractual restrictions with us. Enforcing our rights could be costly, time-consuming, distracting and harmful to significant business relationships. Claims that a third party illegally obtained and is using trade secrets can be difficult to prove, and courts outside the United States may be less willing to protect trade secrets. Additionally, others may independently develop non-infringing technologies that are similar or superior to ours. Any significant failure or inability to adequately protect and control our proprietary assets may harm our business and reduce our ability to compete.

We may face claims for intellectual property infringement, which could subject us to monetary damages or limit us in using some of our technologies or providing certain services.

There has been substantial litigation in the United States regarding intellectual property rights in the information technology industry. We cannot be certain that we do not infringe on the intellectual property rights of third parties, including the intellectual property rights of third parties in other countries, which could result in a liability to us. Historically, patent applications in the United States and some foreign countries have not been publicly disclosed until eighteen months following submission of the patent application, and we may not be aware of currently filed patent applications that relate to our products or processes. If patents are later issued on these applications, we may be liable for infringement. In the event that claims are asserted against us, we may be required to obtain licenses from third parties (if available on acceptable terms or at all). Any such claims, regardless of merit, could be time consuming and expensive to litigate or settle, divert the attention of management and materially disrupt the conduct of our business, and we may not prevail. Intellectual property infringement claims against us could subject us to liability for damages and restrict us from providing services or require changes to certain products or services. Although our policy is to obtain licenses or other rights where necessary, we cannot provide assurance that we have obtained all required licenses or rights. If a successful claim of infringement is brought against us and we fail to develop non-infringing products or services, or to obtain licenses on a timely and cost-effective basis, our reputation, business, financial condition and results of operations could be adversely affected.

Risks Related to Our Growth Strategy

When we engage in acquisitions, investments in new businesses or divestitures of existing businesses, we face risks that may adversely affect our business.

We have acquired and may continue to acquire or make investments in businesses that offer complementary services and technologies. Acquisitions may not be completed on favorable terms and acquired assets, data or businesses may not be successfully integrated into our operations. Even if we devote substantial management attention and resources to integrating acquired businesses in order to fully realize the anticipated benefits of such acquisitions, the businesses and assets acquired may not be successful or continue to grow at the same rate as when operated independently or may require greater resources and investments than we originally anticipated. Acquisitions involve significant risks and uncertainties, including:

- failing to achieve the financial and strategic goals for the acquired business;
- paying more than fair market value for an acquired company or assets;

- failing to integrate the operations and personnel of the acquired businesses in an efficient and timely manner;
- difficulties associated with the implementation and maintenance of internal controls required pursuant to the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley Act"), including over acquired businesses not previously subject to the requirements of the Sarbanes-Oxley Act;
- disrupting our ongoing businesses, including loss of sales;
- distracting management focus from our existing businesses;
- assumption of unanticipated or contingent liabilities;
- failing to retain key personnel;
- incurring the expense of an impairment of assets due to the failure to realize expected benefits;
- damaging relationships with employees, customers or strategic partners;
- diluting the share value of existing stockholders; and
- incurring additional debt or reducing available cash to service our existing debt.

We evaluate and may in the future divest certain assets or businesses that no longer fit with our growth strategy. Divestitures involve significant risks and uncertainties, including:

- disrupting our ongoing businesses;
- failure to effectively transfer liabilities, contracts, facilities and employees to buyers;
- · reducing our revenues;
- losing key personnel;
- distracting management focus from our existing businesses;
- the possibility that we will become subject to third-party claims arising out of such divestiture;
- indemnification claims for breaches of representations and warranties in sale agreements;
- damaging relationships with employees and customers as a result of transferring a business to new owners; and
- failure to close a transaction due to conditions such as financing or regulatory approvals not being satisfied.

These risks could harm our business, financial condition or results of operations, particularly if they occur in the context of a significant acquisition or divestiture. In addition, changes in laws and regulations following a significant acquisition or divestiture could adversely impact our business, financial condition, results of operations and growth prospects. Additional acquisitions of businesses having a significant presence outside the United States will further increase our exposure to the risks of conducting operations in international markets.

We depend, in part, on strategic alliances, joint ventures and acquisitions to grow our business. If we are unable to make strategic acquisitions and develop and maintain these strategic alliances and joint ventures, our growth may be adversely affected.

An important focus of our business is to identify business partners who can enhance our services and enable us to develop solutions that differentiate us from our competitors. We have entered into several alliance agreements or license agreements with respect to certain of our datasets and services and may enter into similar agreements in the future. These arrangements may require us to restrict our use of certain of our technologies among certain customer industries, or to grant licenses on terms that ultimately may prove to be unfavorable to us, either of which could adversely affect our business, financial condition or results of operations. Relationships with our alliance agreement partners may include risks due to incomplete information regarding the marketplace and commercial strategies of our partners, and our alliance agreements or other licensing agreements may be the subject of contractual disputes. If we or our alliance agreements' partners are not successful in maintaining or commercializing the alliance agreements' services, such commercial failure could adversely affect our business.

In addition, a significant strategy for our international expansion is to establish operations through strategic alliances or joint ventures with local financial institutions and other partners. We cannot provide assurance that these arrangements will be successful or that our relationships with our partners will continue to be mutually beneficial. If these relationships cannot be established or maintained, it could negatively impact our business, financial condition and results of operations. Moreover, our ownership in and control of our foreign investments may be limited by local law.

We also selectively evaluate and consider acquisitions as a means of expanding our business and entering into new markets. We may not be able to acquire businesses we target due to a variety of factors such as competition from companies that are better positioned to make the acquisition. Our inability to make such strategic acquisitions could restrict our ability to expand our business and enter into new markets which would limit our ability to generate future revenue growth. Additionally, given some of our equity interests in various companies, we may be limited in our ability to require or influence such companies to make

acquisitions or take other actions that we believe to be in our or their best interests. Our inability to take such actions could have a material impact on our revenues or earnings.

Risks Related to Our Indebtedness

We have a substantial amount of debt which could adversely affect our financial position and prevent us from fulfilling our obligations under the debt instruments.

As of December 31, 2024, the book value of our debt was approximately \$5,147.2 million consisting of outstanding borrowings under Trans Union LLC's senior secured credit facility. We may also incur significant additional indebtedness in the future. Our substantial indebtedness may:

- make it difficult for us to satisfy our financial obligations, including with respect to our indebtedness;
- limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions or other general business purposes;
- limit our ability to use our cash flow or obtain additional financing for future working capital, capital expenditures, acquisitions or other general business purposes;
- require us to use a substantial portion of our cash flow from operations to make debt service payments;
- expose us to the risk of increased interest rates as certain of our borrowings, including Trans Union LLC's senior secured credit facility, are at variable rates of interest;
- limit our ability to pay dividends;
- limit our flexibility to plan for, or react to, changes in our business and industry;
- place us at a competitive disadvantage compared with our less-leveraged competitors; and
- increase our vulnerability to the impact of adverse economic and industry conditions.

In addition, the credit agreement governing Trans Union LLC's senior secured credit facility contains restrictive covenants that may limit our ability to engage in activities that may be in our long-term best interest. Our failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of substantially all of our debt.

Despite our current level of indebtedness, we may still be able to incur additional indebtedness. This could increase the risks associated with our substantial indebtedness.

We and our subsidiaries may be able to incur substantial additional indebtedness in the future. The terms of the credit agreement govern our debt limit, but do not prohibit, us or our subsidiaries from incurring additional indebtedness, and any additional indebtedness incurred in compliance with these restrictions could be substantial. If we incur any additional debt, the priority of that debt may impact the ability of existing debt holders to share ratably in any proceeds distributed in connection with any insolvency, liquidation, reorganization, dissolution or other winding-up of us, subject to collateral arrangements. These restrictions will also not prevent us from incurring obligations that do not constitute indebtedness. We also have the ability to request incremental loans on the same terms under the existing senior secured credit facility up to the greater of \$1.0 billion and 100% of consolidated EBITDA and may incur additional incremental loans so long as the senior secured net leverage ratio does not exceed 4.25 to 1.0, subject to certain additional conditions and commitments by existing or new lenders to fund any additional borrowings. If new indebtedness is added to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

We may not be able to generate sufficient cash to service all of our indebtedness and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

Our ability to make scheduled payments due on our debt obligations or to refinance our debt obligations depends on our financial condition and operating performance, which are subject to prevailing economic, industry and competitive conditions and to certain financial, business, legislative, regulatory and other factors beyond our control as discussed above. Our total scheduled principal repayments of debt made in 2024 and 2023 were \$48.9 million and \$100.0 million, respectively. Our total interest expense for 2024 and 2023 was \$265.2 million and \$288.2 million, respectively. We may be unable to maintain a level of cash flow from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness.

If our cash flow and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, seek additional debt or equity capital or restructure or refinance our indebtedness. We may not be able to implement any such alternative measures on commercially reasonable terms or at all and, even if successful, those alternative actions may not allow us to meet our scheduled debt service obligations. The credit agreement governing Trans Union LLC's senior secured credit facility restricts our ability to dispose of assets and use the proceeds from those dispositions and may also restrict our

ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due. We may not be able to consummate those dispositions or to obtain proceeds in an amount sufficient to meet any debt service obligations then due. In addition, under the covenants of the credit agreement governing our senior secured credit facility, TransUnion Intermediate Holdings, Inc., our wholly-owned subsidiary, is restricted from making certain payments, including dividend payments to TransUnion, subject to certain exceptions.

Our inability to generate sufficient cash flow to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, would materially and adversely affect our financial position and results of operations and our ability to satisfy our obligations.

If we cannot make our scheduled debt payments, we will be in default and all outstanding principal and interest on our debt may be declared due and payable, the lenders under Trans Union LLC's senior secured credit facility could terminate their commitments to loan money, Trans Union LLC's secured lenders (including the lenders under Trans Union LLC's senior secured credit facility) could foreclose against the assets securing their borrowings and we could be forced into bankruptcy or liquidation.

Risks Related to Ownership of Our Common Stock

Our stock price has recently been volatile, and may continue to be volatile and/or decline, regardless of our operating performance, and you may not be able to resell shares of our common stock at or above the price you paid or at all.

In the recent past, our stock price has been volatile and had declined due to a number of factors, including the deteriorating macroeconomic environment, changing expectations about our future revenue and operating results, and softening of the forward-looking guidance we have provided. The financial markets have at various times experienced significant price and volume fluctuations that have impacted the stock prices of many companies in the broader markets and in our industry in particular. These broad market and industry-specific fluctuations, as well as deteriorating macroeconomic conditions, could have a material adverse effect on our results of operations, financial condition and stock price. We reconcile the fair value of our reporting units to our market capitalization during our annual goodwill impairment test, which we conduct more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired. A decrease in our market capitalization could be an indicator that one or more of our reporting units has a goodwill impairment.

This market volatility, as well as general economic, market or political conditions, could adversely affect the market price of our common stock, regardless of our actual operating performance, and you may not be able to resell your shares at or above the price you paid. In addition to the risks described in this section, several factors that could cause the price of our common stock to fluctuate significantly include, among others, the following, most of which we cannot control:

- quarterly variations in our operating results compared to market expectations;
- guidance that we provide to the public, any changes in this guidance or our failure to meet this guidance;
- changes in preferences of our customers;
- announcements of new products or significant price reductions by us or our competitors;
- size of our public float;
- stock price performance of our competitors;
- publication of research reports about our industry;
- changes in market valuations of our competitors;
- fluctuations in stock market prices and volumes;
- default on our indebtedness;
- actions by our competitors;
- changes in senior management or key personnel;
- changes in financial estimates by securities analysts;
- negative earnings or other announcements by us or other credit reporting agencies;
- downgrades in our credit ratings or the credit ratings of our competitors;
- issuances of capital stock or future sales of our common stock or other securities;
- investor perceptions or the investment opportunity associated with our common stock relative to other investment alternatives;
- the public response to press releases or other public announcements by us or third parties, including our filings with the SEC:
- announcements relating to litigation;
- the sustainability of an active trading market for our stock;

- changes in accounting principles;
- global economic, legal and regulatory factors unrelated to our performance; and
- other events or factors, including those resulting from natural disasters, war, acts of terrorism or responses to these
 events.

In addition, price volatility may be greater if the public float and trading volume of our common stock is low, and the amount of public float on any given day can vary depending on whether our stockholders choose to hold their shares for the long term.

In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

Our business and operations are exposed to risks arising from developments and trends associated with climate change and other environmental and social matters, including risks associated with our own reporting or other initiatives.

There are inherent environmental, including climate-related, and social risks wherever business is conducted. Various meteorological phenomena and extreme weather events (including, but not limited to, storms, flooding, drought, wildfire, and extreme temperatures) may directly or indirectly disrupt our operations (including the productivity of our employees) or those of our suppliers or infrastructure on which we rely, require us to incur additional operating or capital expenditures or otherwise adversely impact our business, financial condition, or results of operations. Climate change may impact the frequency and/or intensity of such events, as well as contribute to chronic physical changes, such as shifting precipitation or temperature patterns or rising sea-levels, which may also impact our operations or infrastructure on which we rely. While we may take various actions to mitigate our business risks associated with climate change, this may require us to incur substantial costs and may not be successful, due to, among other things, the uncertainty associated with the longer-term projections associated with managing climate risks. Any significant failure, compromise, interruption or a significant slowdown of operations, whether as a result of climate change or otherwise, may impair the Company's ability to deliver its products and services. Additionally, we expect to be subject to increased regulations, reporting requirements, standards or expectations regarding the environmental impacts of our business. Such regulations and other expectations are not uniform, and may be inconsistently interpreted or applied, which can increase the complexity and cost of compliance as well as any associated litigation or enforcement risks. Changing market dynamics and other global and domestic policy developments also have the potential to disrupt our business, the business of our suppliers and/or customers, or otherwise adversely impact our business, financial condition, or results of operations.

Finally, increased scrutiny regarding climate, human capital, and other practices and disclosures are likely to continue. Such increased scrutiny may result in increased costs, changes in demand, enhanced compliance or disclosure obligations, increased legal exposure or other adverse impacts on our business, financial condition or results of operations. While we have engaged and may engaged in the future in voluntary initiatives and reporting on environmental and social matters, such initiatives and reporting may be costly and may not have the desired effect. Many of our initiatives, including targets and disclosures, are informed by methodologies, standards, and data that continue to evolve, are subject to varying interpretations, and are often subject to factors outside of our control. As with other companies, our approach to such matters evolves over time as well, and we cannot guarantee that our approach will align with the expectations or preferences of any particular stakeholder. For example, there have been targeted efforts by certain parties, including policymakers, to reduce companies' attention to environmental and social matters which may result in additional costs or complexities in navigating stakeholder expectations. Moreover, actions or statements that we may make based on expectations, assumptions, calculation methodologies or thirdparty information that we currently believe to be reasonable may subsequently be determined to be erroneous or be subject to misinterpretation. For example, there have been increasingly nuanced allegations against companies making significant environmental and social claims due to a variety of perceived deficiencies in disclosure, methodology, or performance, including as stakeholder perceptions of sustainability continue to evolve. Our approach to measuring and assessing our GHG emissions and establishing or pursuing targets for the reduction of our emissions, or other targets and metrics, may ultimately be deemed to be inconsistent with future regulatory requirements or best practices, or revised interpretations of existing requirements and standards. Even if this is not the case, our current actions may subsequently be determined to be insufficient or not aligned to best practices by various stakeholders. Our disclosures on these matters, a failure to satisfy evolving stakeholder expectations for environmental and social practices and reporting, a failure to successfully navigate competing stakeholder expectations, or a failure or perceived failure to meet our commitments or targets (including the manner in which we complete such initiatives) on our established timeline may potentially harm our reputation and impact relationships with investors. If our environmental and social practices, reporting and performance do not meet investor, consumer, or employee, or other stakeholder expectations, or are perceived as not meeting those expectations, our brand, reputation and customer retention may be negatively impacted, and we may be subject to investor or regulator engagement regarding such matters, which could adversely impact our business, financial condition or results of operations.

Anti-takeover provisions in our organizational documents might discourage, delay or prevent acquisition attempts for us that you might consider favorable.

Certain provisions of our third amended and restated certificate of incorporation and fifth amended and restated bylaws may have an anti-takeover effect and may delay, defer or prevent a merger, acquisition, tender offer, takeover attempt or other change of control transaction that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by our stockholders.

These provisions provide for, among other things:

- the ability of our Board to issue one or more series of preferred stock;
- advance notice for nominations of directors by stockholders and for stockholders to include matters to be considered at our annual meetings; and
- certain limitations on convening special stockholder meetings.

The anti-takeover provisions discussed above could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares.

Our ability to pay cash dividends may be limited by the terms of our secured credit facility.

In February 2018, our Board approved a dividend policy pursuant to which we intend to pay quarterly cash dividends on our common stock. The terms of our senior secured credit facility impose certain limitations on our ability to pay dividends. We may, however, declare and pay cash dividends up to an unlimited amount unless a default or event of default exists under the senior secured credit facility. Any determination to pay dividends in the future will be at the discretion of our Board and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our Board deems relevant.

There can be no assurance that we will repurchase shares pursuant to our share repurchase program consistent with historical amounts or at all.

Our share repurchase program may change from time to time, and we may not repurchase shares in any particular amounts, in amounts consistent with historical practice, or at all. Our repurchase program does not obligate the Company to repurchase any specific dollar amount or to acquire any specific number of shares and the timing and amount of repurchases, if any, will depend on several factors, including market and business conditions, applicable debt covenants, the timing and amount of cash proceeds from asset dispositions, the timing and amount of any like-kind exchange transactions and other tax-planning matters, the trading price of our common stock, the nature of other investment opportunities, and other factors as our Board may deem relevant from time to time. Repurchase activity could have a negative effect on our stock price, increase volatility, or fail to enhance stockholder value.

General Risks

Economic and other conditions may adversely impact the valuation of our assets resulting in impairment charges that could have a material adverse impact on our results from operations.

We have significant amounts of goodwill and intangible assets. On a regular basis, we evaluate our assets for impairment based on various factors, including actual operating results and expected trends of projected revenues, profitability and cash flows. As of December 31, 2024, our Consolidated Balance Sheet included goodwill of \$5,144.3 million and other net intangibles of \$3,257.5 million. We conduct a goodwill impairment test in the fourth quarter of each year, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired. We have the option to first perform a qualitative analysis to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying value. If the qualitative analysis indicates that an impairment is more likely than not for any reporting unit, we perform a quantitative impairment test for that reporting unit. Our quantitative impairment test consists of a fair value calculation for each reporting unit that combines an income approach, using the discounted cash flow method, and a market approach, using the guideline public company method. The quantitative impairment test requires the application of a number of significant assumptions, including estimates of future revenue growth rates, EBITDA margins, discount rates, and market multiples. The projected future revenue growth rates and EBITDA margins, and the resulting projected cash flows of each reporting unit are based on historical experience and internal operating plans reviewed by management, extrapolated over the forecast period. Discount rates are determined using a weighted average cost of capital adjusted for risk factors specific to each reporting unit.

We believe the assumptions that we use in our qualitative and quantitative analysis are reasonable and consistent with assumptions that would be used by other marketplace participants. However, such assumptions are inherently uncertain. During times of economic distress, declining demand and declining earnings could lead to us to have less favorable estimates of our future cash flows, discount rates or market multiples. Such changes could lead to lower estimated fair values of our reporting units, which could lead to a material impairment charge. In certain markets where we operate, macroeconomic conditions are

unfavorable. If these unfavorable macroeconomic conditions persist longer than we currently expect, or are worse than we currently expect, our estimates of revenue growth rates and EBITDA margins would decline, which could lead to an impairment of goodwill.

During the three months ended September 30, 2023, we identified a triggering event requiring an interim impairment assessment for our United Kingdom reporting unit, which resulted in a goodwill impairment of \$414 million. The worsening macroeconomic conditions from inflationary pressures and rising interest rates increasingly impacted our United Kingdom business for the third quarter and the near-term outlook. Any future reduction to our forecasts of our reporting units, including the United Kingdom, may result in impairment that could have a material adverse effect on our business and financial results.

Any change to the conclusion of our reporting units or the aggregation of components within our reporting units could result in a different outcome to our annual impairment test. See Part II, Item 7, "Management Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Estimates - Goodwill" for further information.

Our efforts to execute any element of our business strategy, including our transformation plan to optimize our operating model and invest in our technology, could experience difficulties, delays, or unexpected costs and may not achieve anticipated benefits and savings.

In November 2023, our Board approved a transformation plan to optimize our operating model and continue to advance our technology. See Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Factors Affecting Our Results of Operations" for additional information. We may not realize, in full or in part, the anticipated benefits and savings from this plan due to unforeseen difficulties, delays, or unexpected costs, which may adversely affect our business and results of operations. Even if the anticipated benefits and savings of the plan are substantially realized, there may be consequences or business impacts that were not expected.

If we fail to implement and maintain proper and effective internal controls over financial reporting, our ability to produce accurate financial statements on a timely basis could be impaired, which could cause investors to lose confidence in our reported financial information and have a negative effect on our stock price.

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be reevaluated frequently. Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). A control, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control's objectives will be met. Because of the inherent limitations in all controls, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within our company will have been detected. Effective internal controls are necessary for us to produce reliable financial reports and are important to prevent fraud. Any failure to maintain or implement new or improved controls over financial reporting could result in material weaknesses or result in the failure to detect or prevent material misstatements in our financial statements, which could cause investors to lose confidence in our reported financial information and harm our stock price.

Pandemics, epidemics, disease outbreaks and other public health crises, such as the COVID-19 pandemic, have disrupted our business and operations, and future public health crises could materially adversely impact our business, financial condition, liquidity and results of operations.

We face various risks related to health epidemics, pandemics and similar outbreaks. For example, the COVID-19 pandemic and the mitigation efforts by governments to attempt to control its spread adversely impacted the global economy, leading to reduced consumer spending and lending activities. Our customers, and therefore our business and revenues, are sensitive to negative changes in general economic conditions. Any new pandemic or other public health crises, or future public health crises, could have a material impact on our business, financial condition and results of operations going forward.

We may not be able to attract and retain the skilled employees that we need to support our business.

Our success depends on our ability to attract and retain experienced management, sales, research and development, analytics, marketing and technical support personnel. If any of our key personnel were unable or unwilling to continue in their present positions, it may be difficult to replace them and our business could be seriously harmed. If we are unable to find qualified successors to fill key positions as needed, our business could be seriously harmed. The complexity of our services requires trained customer service and technical support personnel. We may not be able to hire and retain such qualified personnel at compensation levels consistent with our compensation structure. Some of our competitors may be able to offer more attractive terms of employment. In addition, we invest significant time and expense in training our employees, which increases their value to competitors who may seek to recruit them. If we fail to retain our employees, we could incur significant expense replacing employees and our ability to provide quality services could diminish, resulting in a material adverse effect on our business.

We are subject to losses from risks for which we do not insure.

For certain risks, we do not maintain insurance coverage because of cost and/or availability. Because we retain some portion of insurable risks, and in some cases retain our risk of loss completely, unforeseen or catastrophic losses in excess of insured limits could materially adversely affect our business, financial condition and results of operations.

If we experience changes in tax laws or adverse outcomes resulting from examination of our tax returns, it could adversely affect our results of operations.

We are subject to federal, state and local income and other taxes in the United States and in foreign jurisdictions. From time to time the United States federal, state, local and foreign governments make substantive changes to tax rules and the application thereof, which could result in materially different corporate taxes than would be incurred under existing tax law or interpretation and could adversely impact profitability. Governments have strengthened their efforts to increase revenues through changes in tax law, including laws regarding transfer pricing, economic presence and apportionment to determine the tax base.

Consequently, significant judgment is required in determining our worldwide provision for income taxes. Our future effective tax rates and the value of our deferred tax assets could be adversely affected by changes in tax laws, as well as changes in our business operations. Our future provision for income taxes could be affected by changes in the composition of earnings in jurisdictions with differing tax rates, changes to our transfer pricing methodologies, changes in the valuation of our deferred tax assets and liabilities, including net operating losses, or changes in determinations regarding the jurisdictions in which we are subject to tax. In addition, we are subject to the examination of our income tax returns and other tax returns by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of adverse outcomes resulting from such examinations to determine the adequacy of our provision for income taxes and reserves for other taxes. Although we believe we have made appropriate provisions for taxes in the jurisdictions in which we operate, changes in tax laws, or challenges from tax authorities under existing tax laws could adversely affect our business, financial condition and results of operations.

The Organization for Economic Cooperation and Development ("OECD") introduced Base Erosion and Profit Shifting Pillar Two rules that impose a global minimum tax rate of 15% among other OECD initiatives. Numerous countries enacted legislation effective as of January 1, 2024 with general implementation of a global minimum tax by January 1, 2025. We expect to have an increase in our effective tax rate in 2025 and will continue to closely monitor evolving legislation and guidance that could change our current assessment.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

Item 1C. CYBERSECURITY

Cybersecurity Risk Management and Strategy

We have developed and implemented a cybersecurity risk management program intended to protect the confidentiality, integrity, and availability of our systems and information. Our cybersecurity risk management program includes a cybersecurity incident response plan.

Our Information Security program is led by a global-level Information Security Department that develops our security policies, standards and procedures guided by the ISO/IEC 27001:2022 principles and aligned to the Center for Internet Security controls. We seek to evolve our approach to protect against increasing and changing security threats around the world.

Our cybersecurity risk management program is integrated with our overall enterprise risk management program, and shares common methodologies, reporting channels and governance processes that apply across the enterprise risk management program to other legal, compliance, strategic, operational, and financial risk areas.

Our cybersecurity risk management program includes the following key elements:

- risk assessments designed to help identify material cybersecurity risks to our critical systems, information, services, and our broader enterprise information technology environment;
- monitoring and reporting of those risks to appropriate levels of management;
- a team comprised of information technology security, infrastructure, and compliance personnel principally responsible for directing our (1) cybersecurity risk assessment processes, (2) security operations processes, and (3) response to cybersecurity incidents;
- the use of external cybersecurity service providers, where appropriate, to assess, test or otherwise assist with aspects of our security processes;
- global associates with access to information technology systems in more than 30 countries and territories across North America, Latin America, Europe, Africa, India and Asia Pacific who receive a combination of general and targeted training to help keep Information Security top of mind;
- a cybersecurity incident response plan and Security Operations Center for responding to cybersecurity incidents; and
- a third-party security risk management process for key service providers based on their respective roles and risk profiles.

We have not identified incidents from known cybersecurity threats, including as a result of any prior cybersecurity incidents, that have materially affected us, including our operations, business strategy, results of operations, or financial condition. We face certain ongoing risks from cybersecurity threats that, if realized, could be reasonably likely to materially affect us, including our operations, business strategy, results of operations, or financial condition. Refer to Part I, Item 1A "Risk Factors" for risks related to cybersecurity.

Cybersecurity Governance

Key Information Security risks are overseen by our Security and Technology Risk Committee (the "STRC"), which escalates significant issues to our Enterprise Risk Management Committee ("ERMC"). The STRC, which is co-chaired by the Chief Technology, Data & Analytics Officer and the Chief Information Security Officer ("CISO"), is responsible for overseeing key risks related to technology and information security for the global enterprise. The STRC provides oversight to ensure key risks related to technology and information security have appropriate controls and mitigations in place. The STRC also oversees associated policies, projects and programs for enterprise risk assessments related to technology and information security. The ERMC is chaired by the Chief Risk & Compliance Officer, and includes the Chief Executive Officer, his direct reports and other key function heads or senior subject matter experts, including the CISO.

The ERMC, which meets monthly, also monitors TransUnion's risk and governance policies and procedures to ensure that TransUnion risks are within the Board-approved Global Risk Taxonomy, which is described below. The ERMC reviews the broader risk environment and provides direction to mitigate (to an acceptable level) identified risks that may adversely affect our ability to achieve strategic objectives. The ERMC stewards our Enterprise Risk Management Policy and additional enterprise policies in risk-related areas, such as privacy and information security and key issues are reported to the appropriate committee of the Board.

Our Board considers cybersecurity risk as critical to the enterprise and delegates the cybersecurity risk oversight function to the Risk and Compliance Committee of the Board. The Risk and Compliance Committee oversees the quality and effectiveness of

our information security framework, including capabilities, policies and controls, and methods for identifying, assessing and mitigating information and cybersecurity risks. The Risk and Compliance Committee also assesses the effectiveness of the Company's management of information security-related risks, including consulting with internal and external advisors as appropriate.

Our CISO reports quarterly to the Risk and Compliance Committee and leads the Company's overall cybersecurity function. The Risk and Compliance Committee receives reports from our CISO on key security topics, which may include, among other things, the cybersecurity risk landscape, our cyber risk management program activities and significant cybersecurity incidents. The Board receives quarterly reports from the Chair of the Risk and Compliance Committee with applicable updates on the Company's cybersecurity risk landscape, and briefings on our cyber risk management program and significant cybersecurity incidents. The CISO and/or the Chief Legal Officer also periodically present to the Board on cybersecurity topics that impact public companies.

Our CISO supervises and assists the ERMC in staying informed about and monitoring efforts to prevent, detect, mitigate, and remediate cybersecurity risks and incidents through various means, which include briefings from internal security personnel; threat intelligence and other information obtained from governmental, public or private sources, including external cybersecurity service providers; and alerts and reports produced by security tools deployed in the information technology environment.

Our CISO is primarily responsible for assessing and managing our material risks from cybersecurity threats. Our CISO has primary responsibility for leading our overall cybersecurity risk management program and supervises both our internal cybersecurity personnel and our external cybersecurity service providers. Our CISO has significant global experience in managing and leading information technology and cybersecurity teams. Our CISO has over 20 years' experience in the technology and security fields, including over 10 years in executive security leadership roles. Our CISO and senior members of the cybersecurity team also participate in both private and public knowledge shares, including maintaining ongoing relationships with government and non-public entities.

ITEM 2. PROPERTIES

Properties

Our corporate headquarters and main data center are located in Chicago, Illinois in an office building that we own. As of December 31, 2024, we lease space in over 110 other locations, including office space and additional data centers. These locations are geographically dispersed to meet our sales and operating needs. We anticipate that suitable additional or alternative space will be available at commercially reasonably terms for future expansion.

ITEM 3. LEGAL PROCEEDINGS

See Part II, ITEM 8 "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 21, "Contingencies" for information regarding our legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Our executive officers, and their positions and ages as of February 13, 2025, are set forth below:

Name	Age	Position
Christopher A. Cartwright	59	President & Chief Executive Officer and Director
Venkat Achanta	52	Executive Vice President, Chief Technology, Data & Analytics Officer
Todd M. Cello	49	Executive Vice President, Chief Financial Officer
Steven M. Chaouki	52	President, U.S. Markets
Timothy J. Martin	54	Executive Vice President, Chief Global Solutions Officer
Susan W. Muigai	55	Executive Vice President, Chief Human Resources Officer
Heather J. Russell	53	Executive Vice President, Chief Legal Officer
Todd C. Skinner	55	President, International

Christopher A. Cartwright has served as the President & Chief Executive Officer of TransUnion and a member of the Board of Directors since May 2019. He joined the Company in August 2013, previously serving as Executive Vice President, U.S. Information Services, where he helped drive TransUnion's transformation into a global information and insights company as the head of the largest business unit, including providing consumer reports, risk scores, analytical services and decision technology to customers in the U.S. across the financial services, insurance, tenant and employment screening and public sector industries.

Prior to joining TransUnion, Mr. Cartwright was the Chief Executive Officer of Decision Insight Information Group, a portfolio of independent businesses providing real property information, software and services to insurance, finance, legal and real estate professionals in the United States, Canada and Europe. Mr. Cartwright also spent almost 14 years at Wolters Kluwer, a global information services and workflow solutions company, where he held a variety of executive positions of increasing responsibility, culminating in CEO of the Corporate and Financial Services Division and Shared Services, North America. Prior to Wolters Kluwer, he was Senior Vice President, Strategic Planning & Operations for Christie's Inc. and Strategy Consultant for Coopers and Lybrand.

Mr. Cartwright earned his bachelor's degree in business administration and a master's in public accountancy from The University of Texas at Austin. He serves on the Board of Directors of P33 Chicago and the Board of Trustees of the Griffin Museum of Science and Industry.

Venkat Achanta has served as Executive Vice President, Chief Technology, Data & Analytics Officer for TransUnion since July 2023. Along with leading TransUnion's unified data strategy and the data science function across the organization, Mr. Achanta is responsible for all aspects of the Company's technology, including strategy, security, product engineering, operations, infrastructure and delivery of solutions that support TransUnion's global information systems. He previously held the role of Executive Vice President, Chief Data & Analytics Officer from February 2022 to July 2023. Mr. Achanta previously served as Executive Vice President and Chief Data & Technology Officer of Neustar, Inc., where he led data science, data strategy and technology teams across the company. While at Neustar, he helped lead the creation of the OneID platform and technology transformation across all products.

Prior to joining Neustar in 2016, Mr. Achanta was Chief Data Officer and Head of Data and Analytics at Walmart, beginning in 2014, leading all data and analytics delivery platforms across the company globally. While at Walmart, he spearheaded the data fabric, advanced analytics platforms and decision services groups. Prior to Walmart, Mr. Achanta was Global Head of Analytics and Big Data at AIG. Mr. Achanta also has held senior leadership positions in technology and data & analytics at Capital One and Experian.

Mr. Achanta earned his Bachelor of Science degree in Computer Science and Engineering from Andhra University in India and his M.B.A. from UCLA's Anderson School of Management.

Todd M. Cello joined the Company in October 1997 and has held numerous roles with increasing levels of responsibility in the corporate finance department. Mr. Cello has served as our Executive Vice President, Chief Financial Officer since August 2017. Prior to his current role, Mr. Cello served as Senior Vice President and International CFO from August 2015 to August 2017, overseeing financial operations for the International segment. Prior to that, Mr. Cello served as Vice President, Financial Planning and Analysis from January 2009 to August 2015, overseeing the enterprise financial planning and analysis function, where he played a lead role in the two leveraged buyouts of TransUnion in 2010 and 2012 and the initial public offering of TransUnion in 2015. Prior to that, Mr. Cello served as Vice President and U.S. Information Services CFO from October 2005 to December 2008, overseeing financial operations of the U.S. Information Services segment. Mr. Cello also serves on the University of Illinois at Chicago's College of Business Advisory Council.

Mr. Cello earned his bachelor's degree in Accounting from University of Illinois at Chicago and is a certified public accountant.

Steven M. Chaouki has served as the President, U.S. Markets since May 2019. U.S. Markets provides consumer reports, actionable insights and analytics to businesses and consumers.

He previously held the role of Executive Vice President, Financial Services from 2013 until May 2019, responsible for the Company's financial services business, which provides solutions to banks, credit unions, finance companies, auto lenders, mortgage lenders, FinTechs and other consumer lenders in the United States. Before joining TransUnion, Mr. Chaouki held roles at HSBC in card/retail services and auto finance. Mr. Chaouki has served on the board of MAIA Biotechnology, Inc. (NYSE American: MAIA) since 2021, where he is a member of the Audit Committee.

Mr. Chaouki earned his bachelor's degree from Boston University and his M.B.A. from the University of Chicago Booth School of Business.

Timothy J. Martin has served as Executive Vice President, Chief Global Solutions Officer since May 2019. In this role, Mr. Martin is responsible for managing revenue growth and profitability through the strategy, planning, innovation and commercialization of nearly all of TransUnion's products and solutions globally. He previously held business management roles at TransUnion leading both a number of industry vertical-focused teams and a high growth horizontal solution called the Specialized Risk Group.

Prior to joining TransUnion in September 2009, Mr. Martin was President and Chief Operating Officer of HSBC Auto Finance where he had direct profit and loss responsibility for all strategy, business development, sales, marketing, pricing, risk management, underwriting operations, customer service and collections. Prior to joining HSBC, he was a consultant with Booz Allen Hamilton (now PWC Strategy&) from 1998 to 2003, and senior marketing analyst with American Airlines from 1992 to 1996. Mr. Martin serves on the non-profit board of the Child Rescue Coalition.

Mr. Martin earned his B.S. in Management from Purdue University and his M.B.A. from the University of Michigan Business School.

Susan W. Muigai has served as Executive Vice President, Chief Human Resources Officer since 2021. She is responsible for leading TransUnion's human resource strategy and function, and nurturing an inclusive, high-performance culture to help TransUnion achieve its vision and strategy.

Ms. Muigai brings deep expertise in talent strategy with an extensive background in global HR, human capital management, organizational leadership, diversity and inclusion, legal and compliance, business transformation, communications and more. She previously spent 16 years at Walmart, based in the U.S., Canada and India, serving as Senior Vice President, People from March 2020 to September 2021, Executive Vice President People/Corporate Affairs, Walmart Canada from August 2016 to August 2020, Senior Vice President People, Walmart Canada from January 2016 to July 2016, Vice President People, Walmart Canada from February 2015 to December 2015, Vice President, International Real Estate and Vice President International Real Estate, Walmart International Real Estate from March 2014 to February 2015, Senior Vice President Legal, General Counsel & Chief Ethics Officer, Walmart India from November 2012 to March 2014, Vice President Audit, Walmart Canada from September 2009 to October 2012, and Senior Director, Risk Management, Walmart Canada from June 2005 to September 2009.

Ms. Muigai earned her Bachelor of Law from the University of Windsor in Canada, and her Master of Law in International Business from the University of London. She serves on the board of directors of Coursera, Inc. (NYSE: COUR) and Breakfast Club of Canada.

Heather J. Russell is Executive Vice President, Chief Legal Officer of TransUnion. Ms. Russell is an accomplished legal executive with more than 25 years of diverse experience across the global financial services and technology sectors. She is responsible for legal, risk, compliance, government and regulatory relations, corporate governance, consumer privacy, business continuity and sustainability functions for TransUnion and its subsidiaries around the world. Prior to joining the Company in 2018, Ms. Russell served as: Executive Vice President, Chief Legal Officer and Corporate Secretary at Fifth Third Bank; Managing Director and Global Head of Public Policy and Regulatory Affairs at Bank of New York Mellon; and as Senior Vice President and Associate General Counsel at Bank of America. She also spent eight years at Skadden in Washington, D.C. and London focused on bank regulatory issues, financial services, corporate finance, and mergers and acquisitions.

Ms. Russell earned her B.A. from the College of William & Mary and her J.D. with honors from American University's Washington College of Law, where she received the Outstanding Graduate Award. Ms. Russell serves on the board of directors of the U.S. Chamber of Commerce, the world's largest business organization. She is also on the boards of Illinois Legal Aid – where she serves on the Fund Development Committee – and the Chicago Council on Global Affairs, where she serves on the Executive Committee and chairs both the Nominating and Governance Committee and the Council's CEO Search Committee.

Todd C. Skinner has served as President, International since August 2021 and is responsible for leading TransUnion's growth across international markets. Mr. Skinner has nearly 30 years of experience delivering information solutions at leading global companies. He joined TransUnion in 2014, previously serving as TransUnion's Regional President of Canada, Latin American

and Caribbean. Prior to joining TransUnion, Mr. Skinner was the President of First Canadian Title Default Solutions, a technology recovery business. Previously, he served as Chief Credit Officer and Chief Operations Officer for Retail Banking and Wealth Management at HSBC. He also served as President and Chief Executive Officer for HSBC Financial, an HSBC subsidiary that operated in consumer finance, private label credit card financing, MasterCard, wholesale mortgage lending, mortgage brokering and full spectrum auto finance.

Mr. Skinner earned his bachelor's degree of commerce from St. Mary's University and his M.B.A. from the Kellogg-Schulich Executive M.B.A. He serves as TransUnion's representative on the Global Board of the U.S.-India Business Council (USIBC) and the board of directors for Trans Union de Mexico S.A., TransUnion International UK Ltd., TransUnion CIBIL Limited.

Our executive officers are elected annually by our Board. There are no family relationships among any of the Company's executive officers.

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

Market Information

Our common stock has been listed on The New York Stock Exchange under the symbol "TRU" since June 25, 2015.

Holders of Record

As of January 31, 2025, we had 8 stockholders of record. We have a greater number of beneficial owners of our stock who own their shares through brokerage firms and other nominees.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased ¹	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Value of Yet Be l	oximate Dollar Shares that May Purchased Under ons or Programs
October 1 to October 31	10,847	\$ 103.45	_	\$	166.5
November 1 to November 30	3,862	116.36		\$	166.5
December 1 to December 31	709	95.20	_	\$	166.5
Total	15,418	\$ 106.30	<u> </u>		

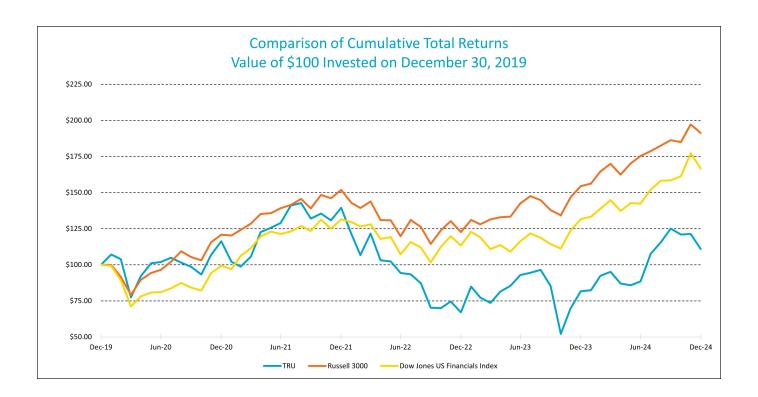
1. Represents shares that were repurchased from employees for withholding taxes for share-based awards pursuant to the Company's equity compensation plans.

On February 11, 2025, our Board authorized the repurchase of up to \$500.0 million of our common stock. Repurchases may be made from time to time at management's discretion at prices management considers to be attractive through open market purchases or through privately negotiated transactions, or otherwise, including pursuant to a Rule 10b5-1 plan, hybrid open market repurchases or an accelerated share repurchase transaction, subject to availability. Open market purchases will be conducted in accordance with the limitations set forth in Rule 10b-18 of the Securities Exchange Act of 1934 (the "Exchange Act") and other applicable legal requirements. We have no obligation to repurchase additional shares, and the timing, actual number and value of the shares that are repurchased, if any, will be at the discretion of management and will depend on a number of factors, including market conditions, the cost of repurchasing shares, the availability of alternative investment opportunities, liquidity, and other factors deemed appropriate. Repurchases may be suspended, terminated or modified at any time for any reason and the share repurchase program does not have an expiration date. Any repurchased shares will be retired and returned to the status of authorized but unissued shares of the Company. This new share repurchase authorization replaces all previous authorizations.

Performance Graph

This performance graph shall not be deemed "soliciting material" or to be "filed" with the SEC for purposes of Section 18 of the Exchange Act, as amended, or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any filing of TransUnion under the Securities Act of 1933, as amended, or the Exchange Act.

The following graph shows a comparison of cumulative total shareholder return for the Company's common stock, the Russell 3000 and the Dow Jones U.S. Financials Index. The graph assumes that \$100 was invested at market close on December 31, 2019, in each of the Company's common stock, the Russell 3000 and the Dow Jones U.S. Financial Index. The cumulative total returns for the Russell 3000 and the Dow Jones U.S. Financial Index assume reinvestment of dividends. The stock price performance of the following graph is not necessarily indicative of future stock price performance.



ITEM 6. RESERVED

Reserved.

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

The following discussion and analysis of TransUnion's financial condition and results of operations is provided as a supplement to, and should be read in conjunction with Part I, Item 1A, "Risk Factors," and Part II, Item 8, "Financial Statements and Supplementary Information," including TransUnion's audited consolidated financial statements and the accompanying notes. In addition to historical data, this discussion contains forward-looking statements about our business, operations and financial performance based on current expectations that involve risks, uncertainties and assumptions. Our actual results may differ materially from those discussed in the forward-looking statements as a result of various factors, including but not limited to those discussed in "Cautionary Notice Regarding Forward-Looking Statements" and Part I, Item 1A, "Risk Factors."

References in this discussion and analysis to the "Company," "we," "us," and "our" refer to TransUnion and its direct and indirect subsidiaries, including TransUnion Intermediate Holdings, Inc. and Trans Union LLC.

Overview

TransUnion is a leading global information and insights company that makes trust possible between businesses and consumers, helping people around the world access opportunities that can lead to a higher quality of life. That trust is built on TransUnion's ability to deliver safe, innovative solutions with credibility and consistency. We call this Information for Good.

Grounded in our heritage as a credit reporting agency, we have built robust and accurate databases of information for a large portion of the adult population in the markets we serve. We use our identity resolution methodology to link and match our expanding high-quality datasets. We use this enriched data and analytics, combined with our expertise, to continuously develop more insightful solutions for our customers, all while maintaining compliance with global laws and regulations. Because of our work, organizations can better understand consumers in order to make more informed decisions, and earn consumer trust through great, personalized experiences, and the proactive extension of the right opportunities, tools and offers. In turn, we believe consumers can be confident that their data identities will result in better offers and opportunities.

We provide solutions that enable businesses to manage and measure credit risk, market to new and existing customers, verify consumer identities, and mitigate fraud. Businesses embed our solutions into their process workflows to deliver critical insights and enable effective actions. Consumers use our solutions to view their credit profiles, access analytical tools that help them understand and manage their personal financial information, and take precautions against identity theft. We have deep domain expertise across a number of attractive industries, which we also refer to as verticals, including Financial Services, Emerging Verticals and Consumer Interactive. Emerging Verticals consists of Insurance, Technology, Retail and E-Commerce, Telecommunications, Media, Tenant & Employment Screening, Collections, and Public Sector. We have a global presence in over 30 countries and territories across North America, Latin America, Europe, Africa, India, and Asia Pacific.

Our addressable market includes the global data and analytics market, which continues to grow as companies around the world increasingly recognize the benefits of data and analytics-based decision making, and as consumers recognize the important role that their data identities play in their ability to procure goods and services. There are several underlying trends supporting this market growth, including the proliferation of data, advances in technology and analytics that enable data to be processed more quickly and efficiently to provide business insights, and growing demand for these business insights across industries and geographies. Leveraging our established position as a leading provider of information and insights, we have grown our business by expanding the breadth and depth of our data, strengthening our analytics capabilities, expanding into complementary adjacent and vertical markets, deepening our solution suite in fraud mitigation and marketing, building out our geographic portfolio, investing in technology infrastructure, and enhancing our global operating model. As a result, we believe we are well positioned to expand our share within the markets we currently serve and capitalize on the larger data and analytics opportunity.

Segments

As discussed in Part II, Item 8, "Financial Statements and Supplementary Data – Notes to Consolidated Financial Statement," Note 1, "Significant Accounting Policies," during the first quarter of 2024, we reorganized our operations to merge our Consumer Interactive operating segment with our U.S. Markets operating segment. In addition, we changed the responsibility for certain international operations previously managed within the U.S. Markets segment to certain regions within the International segment. We now report two operating segments, U.S. Markets and International, which are consistent with our reportable segments, and reflect the structure of the Company's internal organization, the method by which the Company's resources are allocated and the manner by which the chief operating decision maker ("CODM") assesses the Company's performance. The reporting of certain revenue from the acquisition of Argus, which was previously reported within our Financial Services vertical, is now reported in Emerging Verticals in the U.S. Markets operating segment. While this change does not impact our operating segments, it does impact our disaggregated revenue disclosures. See Part II, Item 8 "Financial Statements and Supplementary Data – Notes to Consolidated Financial Statement," Note 19, "Reportable Segments" for additional information about our operating segments.

U.S. Markets

The U.S. Markets segment provides consumer reports, actionable insights and analytics to businesses and consumers. Businesses use our services to acquire customers, assess consumers' ability to pay for services, identify cross-selling opportunities, measure and manage debt portfolio risk, collect debt, verify consumer identities, mitigate fraud risk and respond to data breach events. Consumers use our services to manage their personal finances and take precautions against identity theft.

International

The International segment provides services similar to our U.S. Markets segment to businesses in select regions outside the United States. Depending on the maturity of the credit economy in each country, services may include credit reports, analytics and technology solutions services and other value-added risk management services. We also have insurance, business and automotive databases in select geographies. These services are offered to customers in a number of industries including financial services, retail credit, insurance, automotive, collections, public sector and communications, and are delivered through both direct and indirect channels. The International segment also provides consumer services similar to those offered by our Consumer Interactive vertical within our U.S. Markets segment that help consumers proactively manage their personal finances and take precautions against identity theft.

Corporate

Corporate provides support services for each of the segments, holds investments, and conducts enterprise functions. Certain costs incurred in Corporate that are not directly attributable to either of the segments remain in Corporate. These costs are typically enterprise-level costs and are primarily administrative in nature.

Factors Affecting Our Results of Operations

The following are certain key factors that affect, or have recently affected, our results of operations:

Macroeconomic and Industry Trends

Our revenues and results of operations have been and can be significantly influenced by general macroeconomic conditions, including but not limited to, interest rates, inflation, housing demand, the availability of credit and capital, employment levels, and consumer confidence.

During 2024, the U.S. economy and labor market remained resilient, with solid GDP growth, rising but still low unemployment, growing real wages and the easing of inflation. The U.S. Federal Reserve maintained higher interest rates into September, which had the effect of slowing aggregate demand, resulting in slower jobs growth and a mild increase in unemployment levels. Higher interest rates have also slowed demand for consumer loans and auto loans, and have had a more pronounced impact on the housing sector, where higher borrowing rates impact both home affordability, driving down purchase activity, and demand for mortgage loan refinancing. The slowdown in demand and job growth, along with lower inflation, prompted the U.S. Federal Reserve to begin lowering interest rates at the end of the third quarter and into the fourth quarter of 2024, with three consecutive rate cuts totaling 100 basis points. These rate cuts could spur renewed consumer confidence to borrow as well as increased demand for rate-sensitive lending products, in particular mortgage loans to the extent that mortgage rates decline in tandem with a lower federal funds rate. However, mortgage rates are not directly tied to the federal funds rate but instead are tied to the 10-year Treasury rates, which rose roughly 100 basis points as of the end of 2024 after hitting a one-year low in September 2024 due to renewed market concerns over inflation. As a result, 30-year mortgage rates remained elevated at yearend, which continues to suppress activity in the housing sector. During 2024, the U.K. also began to show some initial signs of improvement driven by falling inflation and moderate growth in other economic indicators, though macroeconomic challenges impacting credit markets remain in this region. Foreign central banks, including in Canada and Europe, have also begun to lower rates, which we expect will increase demand for rate-sensitive lending products. These dynamics impact the comparability of our results of operations, including our revenue and expense, between the periods presented below.

The ongoing uncertainty and the unpredictable nature of the macroeconomic environment could have a material adverse impact on various aspects of our business in the future, including our stock price, results of operations and financial condition, including the carrying value of our long-lived assets such as goodwill and intangible assets.

Effects of Inflation

We believe that elevated levels of inflation have had, and will continue to have, a negative impact on our business and results of operations, including decreased demand for our services. The U.S. Federal Reserve and several international central banks have begun lowering interest rates in response to significant reductions in inflation levels from peak levels in 2022 and 2023, and have indicated that further interest rate reductions in the future are likely. In the U.S., inflation expectations remain elevated as the labor market remains strong and economic growth resilient, easing pressures on the Federal Reserve to continue lowering rates in 2025, while markets assess the potential implementation and impact of policies of the new administration on inflation. Meanwhile, rates that remain elevated relative to historic levels may result in depressed consumer spending on non-essential

goods and services, and consequently lower demand for credit, which could have a material adverse impact on various aspects of our business in the future.

Developments that Impact Comparability Between Periods

The following developments impact the comparability of our balance sheets, results of operations and cash flows between years:

Transformation Plan

On November 12, 2023, our Board approved a transformation plan to optimize our operating model and continue to advance our technology. We expect to recognize one-time pre-tax expenses associated with this transformation plan of \$355.0 to \$375.0 million from the fourth quarter of 2023 through the end of 2025. All pre-tax expenses will be cash expenditures, other than approximately \$15.0 million of non-cash, facility exit costs. In addition, capital expenditures were 8% of revenues in 2024, below our prior expectation of 9%, driven by more efficient spend throughout the year in addition to higher revenues, and we expect capital expenditures to remain at 8% for 2025 due to investment in our technology infrastructure in connection with this transformation plan. Upon completion of this program, we expect to generate annual savings of \$120.0 to \$140.0 million and reduce our capital expenditures from 8% of revenue to 6%, based on 2023 revenue. During the year ended December 31, 2024, we realized annualized savings of approximately \$85.0 million from the transformation plan. The following summarizes initiatives under the transformation plan.

- The operating model optimization program will eliminate certain roles, transition certain job responsibilities to our Global Capability Centers, which we expect will improve productivity, reduce costs and fund growth, optimize business processes, and reduce our facility footprint. We expect to incur total one-time pre-tax expenses of \$205.0 to \$215.0 million, including employee separation expenses of approximately \$110.0 million, facility exit expenses of approximately \$45.0 million, and business optimization expenses of approximately \$55.0 million.
- The incremental investment to advance our technology is the final phase of our accelerated technology investment. We expect to incur one-time pre-tax expenses of \$150.0 to \$160.0 million, including approximately \$65.0 million in 2024 related to the final year of Project Rise, and approximately \$90.0 million of incremental expenses during 2024 and 2025 to streamline our product delivery platforms, and leverage the cloud-based infrastructure being established with Project Rise. The accelerated technology investment will fundamentally transform our technology infrastructure by implementing a global cloud-based approach to streamline product development, increase the efficiency of ongoing operations and maintenance, enable a continuous improvement approach, and provide a single global platform for fulfillment of our product lines. Project Rise was announced in February 2020 and expanded in February 2022, and completed in 2024 with a total estimated expense of approximately \$240.0 million, including the approximately \$65.0 million to be incurred in 2024, as discussed above.

We have incurred cumulative expenses associated with the operating model optimization program of \$172.4 million through December 31, 2024, comprised of restructuring expenses related to employee separation costs and facility exit charges as well as other business optimization expenses. We have accrued liabilities for the payment of employee separation costs of \$13.8 million as of December 31, 2024. We have incurred cumulative costs for the final phase of our accelerated technology investment of \$84.2 million through December 31, 2024. The remaining costs associated with the operating model optimization program and final phase of our accelerated technology investment will be incurred in 2025. See Part II, Item 8, "Financial Statements and Supplementary Data – Notes to Consolidated Financial Statement," Note 11, "Restructuring" for additional information about our restructuring expenses and "Results of Operations – Non-GAAP Measures" for additional details of the composition of these expenses.

Debt

On December 12, 2024, we executed Amendment No. 24 to the Senior Secured Credit Facility, pursuant to which we entered into Senior Secured Term Loan B-9 with an aggregate principal amount of \$1.9 billion, the proceeds of which were used to repay in full Senior Secured Term Loan B-7. In addition, we increased the principal on Senior Secured Term Loan B-8 by \$425.0 million and used the increase in proceeds to repay a portion of Senior Secured Term Loan B-5. In connection with this refinancing, we incurred related financing fees and expenses.

On June 24, 2024, we executed Amendment No. 23 to the Senior Secured Credit Facility, pursuant to which we entered into Senior Secured Term Loan B-8 with an aggregate principal amount of \$1.5 billion, the proceeds of which were used to repay a portion of Senior Secured Term Loan B-5. In connection with this refinancing, we incurred related financing fees and expenses.

On February 8, 2024, we executed Amendment No. 22 to the Senior Secured Credit Facility, pursuant to which we entered into Senior Secured Term Loan B-7 with an aggregate principal amount of \$1.9 billion, the proceeds of which were used to repay Senior Secured Term Loan B-6 in full and pay the related financing fees and expenses.

On October 27, 2023, we executed Amendment No. 21 to the Senior Secured Credit Facility, pursuant to which we entered into Senior Secured Term Loan A-4 with an aggregate principal amount of \$1.3 billion, the proceeds of which were used to repay Senior Secured Term Loan A-3 in full, repay \$300.0 million of Senior Secured Term Loan B-6, and pay the related financing fees and expenses. In addition, we increased the borrowing capacity on the Senior Secured Revolving Credit Facility from \$300.0 million to \$600.0 million.

In the second, third, and fourth quarters of 2024, we prepaid \$80.0 million, \$25.0 million, and \$45.0 million, respectively, for a total of \$150.0 million, of our Senior Secured Term Loan B-5, funded from cash-on-hand. In each of the first three quarters of 2023, we prepaid \$75.0 million, and in the fourth quarter of 2023 we prepaid \$25.0 million, for a total of \$250.0 million in 2023, of our Senior Secured Term Loan B-6, funded from cash-on-hand. During the first quarter of 2022 we prepaid \$400.0 million, and in the fourth quarter of 2022 we prepaid \$200.0 million, for a total of \$600.0 million in 2022, of our Senior Secured Term Loan B-6, funded from cash-on-hand. These transactions affect the comparability of interest expense between years, as further discussed in "Results of Operations – Non-Operating Income and (Expense) – Interest Expense" below.

In 2024, we entered into interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loan or similar replacement debt. The swaps commenced on December 31, 2024, and expire on December 31, 2027, with a current aggregate notional amount of \$1.1 billion that amortizes each quarter beginning the first quarter 2025. The swaps require us to pay fixed rates varying between 3.0650% and 3.9925% in exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

Legal Matters

In October 2023, we agreed to settle two matters with federal regulators for a total of \$23.0 million. On October 5, 2023, we reached a settlement in the form of a Consent Order with the CFPB and the FTC pursuant to which we agreed to pay \$11.0 million in redress and \$4.0 million in civil money penalties in connection with alleged violations under the FCRA related to our tenant and employment screening business. On October 10, 2023, we reached a settlement with the CFPB in the form of a Consent Order pursuant to which we agreed to pay \$3.0 million in redress and \$5.0 million in civil money penalties in connection with alleged violations of law in connection with the placement and lifting of security freezes resulting from certain system issues. Both of these settlements were paid in 2023.

On April 12, 2022, after failed settlement negotiations with the CFPB regarding the CFPB's allegations that we failed to comply with and timely implement the 2017 Consent Order and further allegations of additional violations related to TransUnion Interactive, Inc.'s marketing practices, the CFPB filed a lawsuit against us, Trans Union LLC, TransUnion Interactive, Inc. and our former President of Consumer Interactive. During 2022, we recorded an incremental \$29.5 million of expense related to this matter. As of December 31, 2024 and 2023, we have an accrued liability of \$56.0 million in connection with this matter and there is a reasonable possibility that a loss in excess of the amount accrued may be incurred, and such an outcome could have a material adverse effect on our results of operations and financial condition. However, any possible loss or range of loss in excess of the amount accrued is not reasonably estimable at this time. In addition, we will incur increased costs litigating this matter. See Part II, Item 8, "Financial Statements and Supplementary Data – Notes to the Consolidated Financial Statements," Note 21, "Contingencies," for further information about this matter.

Goodwill Impairment

During the third quarter of 2023, we identified a triggering event requiring an interim impairment assessment for our United Kingdom reporting unit, which resulted in a goodwill impairment of \$414.0 million, as discussed in Part II, Item 8, "Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements," Note 6, "Goodwill."

Acquisitions and Divestitures

On April 8, 2022, we acquired 100% of the equity of the entities that comprised Verisk Financial Services ("VF"). We retained the core businesses of Argus and, as discussed further below, divested the remaining non-core businesses on December 30, 2022. Argus provides financial institutions, payments providers, and retailers worldwide with competitive studies, predictive analytics, models, and advisory services. The results of operations of Argus are included in the U.S. Markets segment in our Consolidated Statements of Operations since the date of the acquisition. We classified the results of operations of the non-core businesses as discontinued operations, net of tax, in the Consolidated Statements of Operations since the acquisition in April 2022. Upon the sale of the non-core businesses in December 2022, we received total proceeds of \$173.9 million, consisting of \$103.6 million in cash, and a note receivable with a face value of \$72.0 million and a fair value of \$70.3 million on the date of sale, and recognized a \$7.5 million gain which is included in discontinued operations, net of tax. We finalized the sale price of the non-core businesses in the third quarter of 2023 and recorded a \$0.5 million reduction of the gain on sale included in discontinued operations, net of tax. See Part II, Item 8, "Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements," Note 2, "Business Acquisitions" and Note 3 "Discontinued Operations," for additional information.

Key Components of Our Results of Operations

Revenue

We report revenue for our two reportable segments, U.S. Markets and International. Within the U.S. Markets segment, we report and disaggregate revenue by vertical, which consists of our Financial Services, Emerging and Consumer Interactive verticals. Within the International segment, we disaggregate revenue by regions, which consists of Canada, Latin America, the United Kingdom, Africa, India, and Asia Pacific.

Cost of Services

Costs of services includes data acquisition and royalty fees, personnel costs related to our databases and software applications, consumer and call center support costs, hardware and software maintenance costs, telecommunication expenses and data center costs.

Selling, General and Administrative

Selling, general and administrative includes personnel-related costs for sales, administrative and management employees, costs for professional and consulting services, advertising and facilities expenses.

Goodwill Impairment

Goodwill impairment relates to the impairment of our United Kingdom reporting unit, as discussed above.

Restructuring

Restructuring relates to the operating model optimization program announced in November 2023.

Non-Operating Income and Expense

Non-operating income and expense includes interest expense, interest income, earnings from equity-method investments, dividends from Cost Method Investments, fair-value adjustments of equity method and Cost Method Investments, if any, expenses related to successful and unsuccessful business acquisitions, loan fees, debt refinancing expenses, certain acquisition-related gains and losses and other non-operating income and expenses.

Results of Operations—Years Ended December 31, 2024, 2023 and 2022

(Tabular amounts in millions, except per share amounts)

For the years ended December 31, 2024, 2023 and 2022, our results of operations were as follows:

	•	Years Ended		Change						
		December 31,		2024 vs	s. 2023	2023 vs.	2022			
	2024	2023	2022	\$	%	\$	%			
Revenue	\$ 4,183.8	\$ 3,831.2	\$ 3,709.9	\$ 352.6	9.2 %	\$ 121.3	3.3 %			
Operating expenses										
Cost of services (exclusive of depreciation and amortization below)	1,673.3	1,517.3	1,385.1	155.9	10.3 %	132.2	9.5 %			
Selling, general and administrative	1,239.3	1,171.6	1,179.4	67.7	5.8 %	(7.8)	(0.7)%			
Depreciation and amortization	537.8	524.4	519.0	13.3	2.5 %	5.4	1.0 %			
Goodwill impairment		414.0		(414.0)	(100.0)%	414.0	nm			
Restructuring	66.8	75.3		(8.5)	(11.3)%	75.3	nm			
Total operating expenses	3,517.1	3,702.7	3,083.5	(185.6)	(5.0)%	619.1	20.1 %			
Operating income	666.7	128.5	626.3	538.2	nm	(497.8)	(79.5)%			
Non-operating income and (expense)										
Interest expense	(265.2)	(288.2)	(230.9)	23.0	(8.0)%	(57.3)	24.8 %			
Interest income	28.5	20.7	4.7	7.8	37.7 %	16.1	nm			
Earnings from equity method investments	18.3	16.3	13.0	2.0	12.3 %	3.3	25.4 %			
Other income and (expense), net	(47.1)	(22.7)	(30.0)	(24.4)	nm	7.3	(24.3)%			
Total non-operating income and (expense)	(265.5)	(273.9)	(243.3)	8.3	(3.0)%	(30.6)	12.6 %			
Income (loss) from continuing operations before income taxes	401.1	(145.3)	383.0	546.5	nm	(528.4)	nm			
Provision for income taxes	(98.8)	(44.7)	(118.9)	(54.1)	nm	74.2	(62.4)%			
Income (loss) from continuing operations	302.3	(190.1)	264.1	492.4	nm	(454.2)	nm			
Discontinued operations, net of tax		(0.7)	17.4	0.7	(100.0)%	(18.1)	nm			
Net income (loss)	302.3	(190.8)	281.5	493.1	nm	(472.3)	nm			
Less: net income attributable to noncontrolling interests	(18.0)	(15.4)	(15.2)	(2.6)	16.9 %	(0.2)	1.3 %			
Net income (loss) attributable to TransUnion	\$ 284.4	\$ (206.2)	\$ 266.3	\$ 490.5	nm	\$ (472.4)	nm			

nm: not meaningful

As a result of displaying amounts in millions, rounding differences may exist in the table above.

Revenue

For 2024, revenue increased \$352.6 million, or 9.2%, compared with 2023, due primarily to growth in both segments, partially offset by a decrease of 0.1% due to the impact of foreign currencies, as further discussed in the Segment Results of Operations section below.

For 2023, revenue increased \$121.3 million, or 3.3%, compared with 2022, due primarily to growth in both segments, partially offset by a decrease of 0.6% due to the impact of foreign currencies, as further discussed in the Segment Results of Operations section below.

Operating Expenses

Cost of services

For 2024, cost of services increased \$155.9 million compared with 2023. The increase was due primarily to:

- an increase of approximately \$138.0 million in product and fulfillment costs resulting from an increase in certain product cost pricing primarily in our U.S. Markets segment, an increase in variable postage related to an increase in breach remediation business in our U.S. Markets segment and an increase in volume in both segments;
- a net increase of approximately \$10.0 million in labor-related costs, primarily due to an increase in annual incentive and stock-based compensation, partially offset by the realization of benefits from our operating model transformation plan;
- an increase of approximately \$9.0 million in technology and communications costs, including costs for our accelerated technology investment; and
- an increase of approximately \$9.0 million from costs related to our operating model optimization program, partially offset by:
 - a decrease of approximately \$15.0 million in integration costs of our business acquisitions, an initiative that was completed in 2023.

For 2023, cost of services increased \$132.2 million compared with 2022. The increase was due primarily to:

- an increase of approximately \$78.0 million in product and fulfillment costs primarily resulting from an increase in third-party royalty costs in our U.S. Markets segment and from the increase in revenue;
- an increase of approximately \$30.0 million in technology and communication costs, including costs for our accelerated technology investment;
- an increase of approximately \$19.0 million in operating costs in the first quarter of 2023 from our April 2022 acquisition in our U.S. Markets segment; and
- an increase of approximately \$17.0 million in labor-related costs due to increased headcount and incentive compensation,

partially offset by:

• a decrease of approximately \$5.0 million from the impact of foreign currencies on our international operations.

Selling, general and administrative

For 2024, selling, general and administrative expenses increased \$67.7 million compared with 2023. The increase was due primarily to:

- a net increase of approximately \$27.0 million in labor-related costs, including annual incentive compensation, stock-based incentive compensation and employee benefits;
- an increase of approximately \$18.0 million in technology and communications costs, including our accelerated technology investment;
- an increase of approximately \$16.0 million in certain legal and regulatory expenses, primarily in our U.S. Markets segment; and
- an increase of approximately \$16.0 million from costs related to our operating model optimization program, partially offset by:
 - a decrease of approximately \$7.0 million in integration costs of our business acquisitions, an initiative that was completed in 2023.

For 2023, selling, general and administrative expenses decreased \$7.8 million compared with 2022. The increase was due primarily to:

- an increase of approximately \$43.0 million in labor-related costs due to increased headcount and stock-based incentive compensation; and
- an increase of approximately \$23.0 million of certain administrative expenses including travel, professional services and miscellaneous taxes,

partially offset by:

• a decrease of approximately \$24.0 million in certain legal and regulatory expenses, primarily due to settlements reached with the CFPB in October 2023;

- a decrease of approximately \$22.0 million in advertising expense, primarily in our U.S. Markets segment;
- a decrease of approximately \$14.0 million in integration-related costs for our 2022 acquisitions in our U.S.
 Markets segment; and
- a decrease of approximately \$6.0 million from the impact of foreign currencies on our international operations.

<u>Depreciation and amortization</u>

For 2024, depreciation and amortization increased \$13.3 million compared with 2023 primarily due to the increase in capital expenditures related to our accelerated technology investment initiative over the past few years.

For 2023, depreciation and amortization was consistent with 2022.

Goodwill impairment

For 2023, we recorded a partial goodwill impairment of \$414.0 million related to our United Kingdom reporting unit. See Part II, Item 8, "Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements," Note 6, "Goodwill," for additional information.

Restructuring

Restructuring expenses relate to our operating model optimization program. For 2024, these expenses include approximately \$24.7 million related to employee separation and \$42.1 million related to facility exits, including a loss on early termination of a facility lease.

For 2023, these expenses include approximately \$71.9 million related to employee separation and \$3.4 million related to facility exits.

See Part II, Item 8, "Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements," Note 11, "Restructuring," for additional information.

Non-Operating Income and (Expense)

Interest expense

For 2024, interest expense decreased \$23.0 million compared with 2023. The decrease in interest expense for 2024 was due primarily to a decrease in outstanding principal balance due to the debt prepayments and refinancing transactions made in 2023 and 2024, partially offset by an increase in the average periodic variable interest rate on the unhedged portion of our debt. Approximately 71.6% of our debt is hedged with interest rate swaps.

For 2023, interest expense increased \$57.3 million compared with 2022. The increase in interest expense for 2023 was due primarily to the impact of an increase in the average periodic variable interest rate on the unhedged portion of our debt, partially offset by a decrease in outstanding principal balance due to the prepayments made in 2022 and 2023. Approximately 73.9% of our debt was hedged with interest rate swaps.

Interest income

For 2024, interest income increased \$7.8 million, compared with 2023. The increase was due primarily to an increase in our average investment balances and an increase in interest rates.

For 2023, interest income increased \$16.1 million, compared with 2022. The increase was due primarily to interest earned on notes receivable, including the note receivable issued in connection with our sale of the non-core VF businesses as discussed above, and an increase in interest on our investments due to the increase in interest rates.

Other income and (expense), net

Other income and (expense), net includes acquisition fees, loan fees, and various other income and expenses.

							Change								
	Years Ended December 31,						2024 vs	s. 2023		. 2022					
		2024		2023		2022	\$	%		\$	%				
Other income and (expense), net:															
Acquisition fees	\$	(11.2)	\$	(8.2)	\$	(23.7)	\$ (3.0)	(36.4)%	\$	15.5	65.4 %				
Debt-related expenses		(20.2)		(11.5)		(11.0)	(8.7)	(75.7)%		(0.5)	(4.5)%				
Other income (expense), net		(15.7)		(3.0)		4.7	(12.7)	nm		(7.7)	nm				
Total other income and (expense), net	\$	(47.1)	\$	(22.7)	\$	(30.0)	\$ (24.4)	nm	\$	7.3	24.5 %				

nm: not meaningful

As a result of displaying amounts in millions, rounding differences may exist in the table above.

Acquisition fees

Acquisition fees represent costs we have incurred for various acquisition-related efforts, for both executed and exploratory transactions, and include costs related to our acquisitions of Argus in 2022.

Debt-related expenses

See Part II, Item 8, "Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements," Note 13, "Debt," for additional information about our debt.

For 2024, debt-related expenses included \$17.8 million of unamortized original issue discount, deferred financing fees, and other related fees expensed as a result of our debt prepayments and refinancings and \$2.4 million of other debt financing expenses.

For 2023, debt-related expenses included \$9.3 million of unamortized original issue discount, deferred financing fees, and other related fees expensed as a result of our debt prepayments and refinancing of our Senior Secured Term Loan A-3, and \$2.2 million of other debt financing expenses.

For 2022, debt-related expenses included \$9.3 million of deferred financing fees and other net costs expensed as a result of our repayment of our Senior Secured Term Loans and the partial repayment of our other Term Loans and \$1.7 million of other debt financing expenses.

Other income (expense), net

	 Years	Ended	Decemb	er 31,	_
	2024	20	23	2022	
Gain (loss) from post-acquisition adjustments from previous acquisitions	\$ (7.2)	\$	(4.3)	\$ 3.	4
Fair value and impairment adjustments	(8.4)		(1.6)	(4.	0)
Transition services agreement income	_		4.8	10.	7
Currency remeasurement gains (losses), net	(2.1)		(4.8)	(6.	3)
Miscellaneous non-operating income and (expense)	1.9		2.9	0.	9
Total other income (expense), net	\$ (15.7)	\$	(3.0)	\$ 4.	7

Gain (loss) from post-acquisition adjustments relate to contingent consideration or to assets and liabilities that occurred after the acquisition measurement period. Fair value and impairment adjustments primarily relate to investments and related call and put options. Transition services agreement income relates to the support services that we provided to the purchaser of our healthcare business that ended in 2023. Currency remeasurement gains (losses), net consist of realized foreign currency gains and losses for transactions in currencies other than the functional currency of the corresponding consolidated entity that were settled during the period. Miscellaneous non-operating income and (expense) includes dividends received from our Cost Method Investments and other miscellaneous non-operating income and expense.

Provision for Income Taxes

For 2024, we reported a 24.6% effective tax rate, which is higher than the 21.0% U.S. federal corporate statutory rate due primarily to nondeductible expenses primarily in connection with executive compensation limitations, foreign withholding taxes, and uncertain tax positions, partially offset by benefits from the research and development credit and the foreign rate differential. In addition, certain deferred tax assets related to expiring foreign tax credits were written off with an offsetting reduction of the valuation allowance.

We continue to evaluate the impact of the OECD efforts to implement a global minimum 15% effective tax rate on certain multinational enterprises, commonly known as Pillar Two. Various changes in international tax laws and regulations based on the Pillar Two proposals and other OECD initiatives have been enacted, some of which impacted us in 2024 or will impact us in 2025 and beyond, resulting in a higher effective tax rate as we realized less benefits from the foreign rate differential and higher withholding taxes.

For 2023, we reported a (30.8)% effective tax rate, which is lower than the 21.0% U.S. federal corporate statutory rate due primarily to the impact of non-deductible goodwill impairment partially offset by benefits on the remeasurement of deferred taxes due to changes in state apportionment rates.

For 2022, we reported a 31.0% effective tax rate, which is higher than the 21.0% U.S. federal corporate statutory rate due primarily to increases in valuation allowances on foreign tax credit carryforwards, nondeductible expenses in connection with certain legal and regulatory matters and executive compensation limitations, and other rate-impacting items, partially offset by benefits from the research and development credit and excess tax benefits on stock-based compensation.

Segment Results of Operations—Years Ended December 31, 2024, 2023 and 2022

Management, including our CODM, evaluates the financial performance of our businesses based on revenue and segment Adjusted EBITDA. As discussed above, we have reorganized our operations and now have two operating segments, U.S. Markets and International. Prior period amounts have been recast to conform to our current operating structure. For the years ended December 31, 2024, 2023 and 2022, our segment revenue, Adjusted EBITDA and Adjusted EBITDA margin were as follows:

					Chang	e	
	Years	Ended Decemb	per 31,	2024 vs.	2023	2023 vs	. 2022
	2024	2023	2022	\$	%	\$	%
Revenue:							
U.S. Markets gross revenue							
Financial Services	\$1,433.8	\$1,244.9	\$1,225.6	\$ 188.9	15.2 %	\$ 19.2	1.6 %
Emerging Verticals	1,215.5	1,168.2	1,128.1	47.3	4.0 %	40.1	3.6 %
Consumer Interactive	588.7	579.7	585.3	9.0	1.5 %	(5.6)	(0.9)%
U.S. Markets gross revenue	\$3,237.9	\$2,992.8	\$2,939.0	\$ 245.1	8.2 %	\$ 53.8	1.8 %
International gross revenue							
Canada	\$ 154.4	\$ 140.5	\$ 129.7	\$ 13.9	9.9 %	\$ 10.9	8.4 %
Latin America	134.7	121.8	114.3	12.9	10.6 %	7.5	6.6 %
UK	227.7	216.6	222.7	11.1	5.1 %	(6.1)	(2.7)%
Africa	66.4	60.6	61.8	5.8	9.5 %	(1.1)	(1.8)%
India	269.4	218.9	174.2	50.6	23.1 %	44.6	25.6 %
Asia Pacific	105.8	91.9	80.3	13.9	15.1 %	11.6	14.4 %
International gross revenue	\$ 958.4	\$ 850.4	\$ 782.9	\$ 108.1	12.7 %	\$ 67.4	8.6 %
Total gross revenue	\$4,196.3	\$3,843.1	\$3,722.0	\$ 353.2	9.2 %	\$ 121.2	3.3 %
Intersegment revenue eliminations	(12.6)	(11.9)	(12.1)	(0.6)	5.3 %	0.2	(1.3)%
Total revenue as reported	\$4,183.8	\$3,831.2	\$3,709.9	\$ 352.6	9.2 %	\$ 121.3	3.3 %
Adjusted EBITDA:							
U.S. Markets	\$1,232.8	\$1,119.0	\$1,144.0	\$ 113.8	10.2 %	\$ (25.0)	(2.2)%
International	425.5	367.5	336.7	58.0	15.8 %	30.8	9.2 %
Adjusted EBITDA margin:							
U.S. Markets	38.1 %	37.4 %	38.9 %		0.7 %		(1.5)%
International	44.4 %	43.2 %	43.0 %		1.2 %		0.2 %

Change

nm: not meaningful

As a result of displaying amounts in millions, rounding differences may exist in the table above.

We define Adjusted EBITDA margin for our segments as the segment Adjusted EBITDA divided by segment gross revenue.

U.S. Markets Segment

Revenue

For 2024, U.S. Markets revenue increased \$245.1 million, or 8.2%, compared with the same period in 2023, due to growth in all verticals. Revenue from Financial Services, Emerging Verticals, and Consumer Interactive increased \$188.9 million, \$47.3 million and \$9.0 million, respectively, as further discussed below.

For 2023, U.S. Markets revenue increased \$53.8 million, or 1.8%, compared with the same period in 2022, due to organic growth in the Financial Services and Emerging Verticals and an increase of 0.6% from our acquisition of Argus, which is included in our Financial Services and Emerging Verticals, partially offset by a decrease in the Consumer Interactive vertical. Revenue from Financial Services and Emerging Verticals increased \$19.2 million and \$40.1 million, respectively, partially offset by a decrease of \$5.6 million in the Consumer Interactive segment as further discussed below.

Financial Services: For 2024, Financial Services revenue increased \$188.9 million, or 15.2%, compared to 2023. A majority of the growth in Financial Services came from our Mortgage line of business, primarily due to increases in price and batch activity. Our other lines of business also grew primarily due to an increase in batch activity and price increases in our Auto line of business, partially offset by a decrease in volumes.

For 2023, Financial Services revenue increased \$19.2 million, or 1.6%, compared with 2022, due primarily to a 1.0% increase from our acquisition of Argus, an increase in our Mortgage line of business primarily from price increases partially offset by volume declines due to higher interest rates, and an increase in our Auto line of business due to price and volume increases. These increases were partially offset by decreases in our Consumer Lending line of business due to softness in the FinTech space from increasing interest rates and in our Card and Banking line of business due primarily to a decrease in volume.

Emerging Verticals: For 2024, Emerging Verticals revenue increased \$47.3 million, or 4.0%, compared with 2023, due primarily to increases in the Insurance and the Technology, Retail and E-Commerce verticals from new business wins and an increase in volumes.

For 2023, Emerging Verticals revenue increased \$40.1 million, or 3.6%, compared to 2022, due to revenue from our acquisition of Argus and increases in our Technology, Commerce and Communications, Insurance, Service & Collections, Public Sector, and Media verticals due primarily to increased volumes in existing products and new products from our recent acquisitions, partially offset by a decrease in our Tenant & Employment vertical due to volume decreases.

Consumer Interactive: For 2024, Consumer Interactive revenue increased \$9.0 million, or 1.5%, compared with 2023, due primarily to an increase in breach remediation revenue, partially offset by a decrease in our Direct channel from slowing demand for paid credit products.

For 2023, Consumer Interactive revenue decreased \$5.6 million, or 0.9%, compared with 2022, due primarily to a decrease in revenue in our Direct channel as reduced advertising and slowing macroeconomic conditions significantly reduced consumer demand for our paid credit products, partially offset by an increase in revenue in our indirect channel from breach remediation revenue and an increase in volumes.

Adjusted EBITDA

For 2024, Adjusted EBITDA increased \$113.8 million due primarily to an increase in revenue and a decrease in labor costs from our operating model optimization program, partially offset by higher variable product and fulfillment costs, an increase in annual incentive compensation, and an increase in litigation expenses. Adjusted EBITDA margins increased 0.7% due primarily to high-margin revenue growth and realization of cost savings from the transformation plan.

For 2023, Adjusted EBITDA decreased \$25.0 million due primarily to higher variable product costs and an increase in people costs, partially offset by an increase in revenue. Adjusted EBITDA margins decreased 1.5% due primarily to a shift in the revenue mix and the lower margin profile of the Argus business.

International Segment

Revenue

For 2024, International revenue increased \$108.1 million, or 12.7%, compared with 2023. The increase was due primarily to higher local currency revenue in all regions, driven by increased volumes from improving economic conditions and new product initiatives, partially offset by a decrease of 0.3% from the impact of foreign currencies.

For 2023, International revenue increased \$67.4 million, or 8.6%, compared with 2022. The increase was due primarily to higher local currency revenue in all regions except for the United Kingdom, driven by increased volumes from improving economic conditions and new product initiatives, partially offset by a decrease of 2.9% from the impact of foreign currencies.

Canada: For 2024, Canada revenue increased \$13.9 million, or 9.9%, compared with 2023. The increase was due primarily to higher local currency revenue from broad-based volume increases, new business wins, and increased batch and breach remediation services, partially offset by a decrease of 1.6% from the impact of foreign currencies.

For 2023, Canada revenue increased \$10.9 million, or 8.4%, compared with 2022. The increase was due primarily to higher local currency revenue from new business wins at large banks and FinTechs, increased breach remediation volumes and other volume increases across key verticals, partially offset by a decrease of 3.9% from the impact of foreign currencies.

Latin America: For 2024, Latin America revenue increased \$12.9 million, or 10.6%, compared with 2023. The increase was due primarily to higher local currency revenue from broad-based growth across several of our markets, partially offset by a decrease of 1.4% from the impact of foreign currencies.

For 2023, Latin America revenue increased \$7.5 million, or 6.6%, compared with 2022. The increase was due primarily to higher local currency revenue from new business in the financial services vertical and an increase in batch jobs and an increase of 0.8% from the impact of foreign currencies.

United Kingdom: For 2024, United Kingdom revenue increased \$11.1 million, or 5.1%, compared with 2023. The increase was primarily due to volume and batch increases and an increase of 2.6% from the impact of foreign currencies, partially offset by the impact of a drop in volume from a one-time contract in the prior year.

For 2023, United Kingdom revenue decreased \$6.1 million, or 2.7%, compared with 2022. The decrease was primarily driven by the impact of a drop in volume for a one-time contract compared to the prior year and a decline in FinTech revenue, partially offset by volume growth from new products across most verticals and an increase of 0.5% from the impact of foreign currencies.

Africa: For 2024, Africa revenue increased \$5.8 million, or 9.5%, compared to 2023. The increase was primarily due to meaningful new business wins and contract renewals as well as volume growth in emerging countries and emerging verticals, partially offset by a decrease of 0.3% from the impact of foreign currencies.

For 2023, Africa revenue decreased \$1.1 million, or 1.8%, compared to 2022. The decrease was primarily driven by a decrease of 12.8% from the impact of foreign currencies, partially offset by an increase in local currency revenue in South Africa from large customers in emerging verticals and growth in the insurance and financial services verticals.

India: For 2024, India revenue increased \$50.6 million, or 23.1%, compared to 2023. The increase was due primarily to higher local currency revenue from strong, broad-based growth across all aspects of the business, including online, batch, consumer and commercial volumes, partially offset by a decrease of 1.6% from the impact of foreign currencies.

For 2023, India revenue increased \$44.6 million, or 25.6%, compared to 2022. The increase was due primarily to higher local currency revenue across all lines of business, including online, batch, consumer and commercial, partially offset by a decrease of 6.5% from the impact of foreign currencies.

Asia Pacific: For 2024, Asia Pacific revenue increased \$13.9 million, or 15.1%, compared to 2023. The increase was due primarily to strong growth in the Philippines across key banking clients, along with growth in Hong Kong from our FinTech and other clients, partially offset by one-time batch jobs in prior year and a decrease of 0.7% from the impact of foreign currencies.

For 2023, Asia Pacific revenue increased \$11.6 million, or 14.4%, compared to 2022. The increase was due primarily to higher local currency revenue in the Philippines from volume and batch increases in the financial services vertical and an increase in the FinTech vertical in Hong Kong, partially offset by a decrease in revenue of 0.6% from the impact of foreign currencies.

Adjusted EBITDA

For 2024, Adjusted EBITDA increased \$58.0 million due primarily to increased revenue in India and other regions as discussed above, partially offset by an increase in annual incentive compensation. Adjusted EBITDA margins increased 1.2% due primarily to a shift in the mix of revenue in our larger regions.

For 2023, Adjusted EBITDA increased \$30.8 million due primarily to increased revenue in India and other regions as discussed above, partially offset by an increase in labor and other people-related costs to support growth initiatives in certain regions. Adjusted EBITDA margins were relatively flat as the revenue increase was largely offset by an increase in labor costs to support growth initiatives in certain regions.

Non-GAAP Measures—Years Ended December 31, 2024, 2023 and 2022

In addition to the financial measures in conformity with generally accepted accounting principles ("GAAP") discussed above, management, including our CODM, evaluates the financial performance of our businesses based on the non-GAAP measures Consolidated Adjusted EBITDA, Consolidated Adjusted EBITDA Margin, Adjusted Net Income, Adjusted Diluted Earnings per Share, Adjusted Provision for Income Taxes, Adjusted Effective Tax Rate and Leverage Ratio.

Non-GAAP Financial Measures

We present Consolidated Adjusted EBITDA, Consolidated Adjusted EBITDA Margin, Adjusted Net Income, Adjusted Diluted Earnings per Share, Adjusted Provision for Income Taxes, Adjusted Effective Tax Rate and Leverage Ratio for all periods presented. These are important financial measures for the Company but are not financial measures as defined by GAAP. These financial measures should be reviewed in conjunction with the relevant GAAP financial measures and are not presented as alternative measures of GAAP. Other companies in our industry may define or calculate these measures differently than we do, limiting their usefulness as comparative measures. Because of these limitations, these non-GAAP financial measures should not be considered in isolation or as substitutes for performance measures calculated in accordance with GAAP, including operating income, operating margin, effective tax rate, net income (loss) attributable to the Company, diluted earnings per share or cash provided by operating activities. Reconciliations of these non-GAAP financial measures to their most directly comparable GAAP financial measures are presented in the tables below.

We present Consolidated Adjusted EBITDA, Consolidated Adjusted EBITDA Margin, Adjusted Net Income, Adjusted Diluted Earnings per Share, Adjusted Provision for Income Taxes and Adjusted Effective Tax Rate as supplemental measures of our operating performance because these measures eliminate the impact of certain items that we do not consider indicative of our cash operations and ongoing operating performance. These are measures frequently used by securities analysts, investors and other interested parties in their evaluation of the operating performance of companies similar to ours.

Our Board and executive management team use Adjusted EBITDA as an incentive compensation measure for most eligible employees and Adjusted Diluted Earnings per Share as an incentive compensation measure for certain of our senior executives.

Under the credit agreement governing our Senior Secured Credit Facility, our ability to engage in activities such as incurring additional indebtedness, making investments and paying dividends is tied to our Leverage Ratio which is partially based on Adjusted EBITDA. Investors also use our Leverage Ratio to assess our ability to service our debt and make other capital allocation decisions.

Consolidated Adjusted EBITDA

Management has excluded the following items from net income (loss) attributable to TransUnion in order to calculate Adjusted EBITDA for the periods presented:

- Discontinued operations, net of tax, as reported on our Consolidated Statements of Operations. We exclude discontinued operations, net of tax because we believe it does not reflect the underlying and ongoing performance of our business operations.
- *Net interest expense* is the sum of interest expense and interest income as reported on our Consolidated Statements of Operations.
- *Provision for income taxes*, as reported on our Consolidated Statements of Operations.
- Depreciation and amortization, as reported on our Consolidated Statements of Operations.
- Goodwill impairment, as reported on our Consolidated Statements of Operations. We exclude goodwill impairment because the amount of such expenses in any specific period may not directly correlate to the underlying performance of our business operations during that period and such expense can vary significantly between periods.
- Stock-based compensation is used as an incentive to engage and retain our employees. It is predominantly a
 non-cash expense. We exclude stock-based compensation because it may not correlate to the underlying
 performance of our business operations during the period since it is measured at the grant date fair value and
 it is subject to variability as a result of performance conditions and timing of grants. These expenses are
 reported within cost of services and selling, general and administrative on our Consolidated Statements of
 Operations.

- Operating model optimization program represents employee separation costs, facility lease exit costs, and other business process optimization expenses incurred in connection with the transformation plan discussed further in "Results of Operations Factors Affecting Our Results of Operations." We exclude these expenses as we believe they are not directly correlated to the underlying performance of our business. Further, these costs will vary and may not be comparable during the transformation initiative as we progress toward an optimized operating model. These costs are reported primarily in restructuring and selling, general and administrative on our Consolidated Statements of Operations.
- Accelerated technology investment includes Project Rise and the final phase of our technology investment announced in November 2023. Project Rise was announced in February 2020 and was originally expected to be completed in 2022. Following our acquisition of Neustar in December 2021, we recognized the opportunity to take advantage of Neustar's capabilities to enhance and complement our cloud-based technology already under development as part of Project Rise. As a result, we extended Project Rise's timeline to 2024 and increased the total estimated cost to approximately \$240 million. In November 2023, we announced our plans to further leverage Neustar's technology to standardize and streamline our product delivery platforms and to build a single global platform for fulfillment of our product lines. The additional investment is expected to be approximately \$90 million during 2024 and 2025 and represents the final phase of the technology investment in our global technology infrastructure and core customer applications. We expect that the accelerated technology investment will fundamentally transform our technology infrastructure by implementing a global cloud-based approach to streamline product development, increase the efficiency of ongoing operations and maintenance and enable a continuous improvement approach to avoid the need for another major technology overhaul in the foreseeable future. The unique effort to build a secure, reliable and performant hybrid cloud infrastructure requires us to dedicate separate resources in order to develop the new cloud-based infrastructure in parallel with our current on-premise environment by maintaining our existing technology team to ensure no disruptions to our customers. The costs associated with the accelerated technology investment are incremental and redundant costs that will not recur after the program has been completed and are not representative of our underlying operating performance. Therefore, we believe that excluding these costs from our non-GAAP measures provides a better reflection of our ongoing cost structure. These costs are primarily reported in cost of services and therefore do not include amounts that are capitalized as internally developed software.
- Mergers and acquisitions, divestitures and business optimization expenses are non-recurring expenses associated with specific transactions (exploratory or executed) and consist of (i) transaction and integration costs, (ii) post-acquisition adjustments to contingent consideration or to assets and liabilities that occurred after the acquisition measurement period, (iii) fair value and impairment adjustments related to investments and call and put options, (iv) transition services agreement income, and (v) a loss on disposal of a business. We exclude these expenses as we believe they are not directly correlated to the underlying performance of our business operations and vary depending upon the timing of such transactions. These expenses are reported in costs of services, selling, general and administrative and other income and (expenses), net, on our Consolidated Statements of Operations.
- Net other adjustments principally relate to: (i) deferred loan fee expense from debt prepayments and refinancing, (ii) currency remeasurement on foreign operations, (iii) other debt financing expenses consisting primarily of revolving credit facility deferred financing fee amortization and commitment fees and expenses associated with ratings agencies and interest rate hedging, (iv) legal and regulatory expenses, net, and (v) other non-operating (income) expense. We exclude these expenses as we believe they are not directly correlated to the underlying performance of our business and create variability between periods based on the nature and timing of the expense or income. These costs are reported in selling, general and administrative and in non-operating income and expense, net as applicable based on their nature on our Consolidated Statements of Operations.

Consolidated Adjusted EBITDA Margin

Management defines Consolidated Adjusted EBITDA Margin as Consolidated Adjusted EBITDA divided by total revenue as reported.

Adjusted Net Income

Management has excluded the following items from net income (loss) attributable to TransUnion in order to calculate Adjusted Net Income for the periods presented:

- Discontinued operations, net of tax (see Consolidated Adjusted EBITDA above)
- Goodwill impairment (see Consolidated Adjusted EBITDA above)
- Amortization of certain intangible assets presents non-cash amortization expenses related to assets that arose
 from our 2012 change in control transaction and business combinations occurring after our 2012 change in
 control. We exclude these expenses as we believe they are not directly correlated to the underlying
 performance of our business operations and vary dependent upon the timing of the transactions that give rise
 to these assets. Amortization of intangible assets is included in depreciation and amortization on our
 Consolidated Statements of Operations.
- Stock-based compensation (see Consolidated Adjusted EBITDA above)
- Operating model optimization program (see Consolidated Adjusted EBITDA above)
- Accelerated technology investment (see Consolidated Adjusted EBITDA above)
- Mergers and acquisitions, divestiture and business optimization (see Consolidated Adjusted EBITDA above)
- *Net other* is consistent with the definition in Consolidated Adjusted EBITDA above except that other debt financing expenses and certain other miscellaneous income and expense that are included in the adjustment to calculate Adjusted EBITDA are excluded in the adjustment made to calculate Adjusted Net Income.
- Total adjustments for income taxes relates to the cumulative adjustments discussed below for Adjusted Provision for Income Taxes. This adjustment is made for the reasons indicated in Adjusted Provision for Income Taxes below. Adjustments related to the provision for income taxes are included in the line item by this name on our consolidated statement of operations.

Adjusted Diluted Earnings Per Share

Management defines Adjusted Diluted Earnings per Share as Adjusted Net Income divided by the weighted-average diluted shares outstanding.

Adjusted Provision for Income Taxes

Management has excluded the following items from our provision for income taxes for the periods presented:

- Tax effect of above adjustments represents the income tax effect of the adjustments related to Adjusted Net Income described above. The tax rate applied to each adjustment is based on the nature of each line item. We include the tax effect of the adjustments made to Adjusted Net Income to provide a comprehensive view of our adjusted net income.
- Excess tax expense (benefit) for stock-based compensation is the permanent difference between expenses recognized for book purposes and expenses recognized for tax purposes, in each case related to stock-based compensation expense. We exclude this amount from the Adjusted Provision for Income Taxes in order to be consistent with the exclusion of stock-based compensation from the calculation of Adjusted Net Income.
- Other principally relates to (i) deferred tax adjustments, including rate changes, (ii) infrequent or unusual valuation allowance adjustments, (iii) return to provision, tax authority audit adjustments, and reserves

related to prior periods, and (iv) other non-recurring items. We exclude these items because they create variability that impacts comparability between periods.

Adjusted Effective Tax Rate

Management defines Adjusted Effective Tax Rate as Adjusted Provision for Income Taxes divided by adjusted income from continuing operations before income taxes. We calculate adjusted income from continuing operations before income taxes by excluding the pre-tax adjustments in the calculation of Adjusted Net Income discussed above and noncontrolling interest related to these pre-tax adjustments from income (loss) from continuing operations before income taxes.

Leverage Ratio

Management defines Leverage Ratio as net debt divided by Consolidated Adjusted EBITDA for the most recent twelve-month period including twelve months of Adjusted EBITDA from significant acquisitions. Net debt is defined as total debt less cash and cash equivalents as reported on the balance sheet as of the end of the period.

For the years ended December 31, 2024, 2023 and 2022, these non-GAAP measures were as follows:

	,	Years Ended	1	Change							
	I	December 3		_	2024 vs			2023 vs.			
	2024	2023	2022		\$	%		\$	%		
Reconciliation of net income (loss) attributable to TransUnion to consolidated Adjusted EBITDA:											
Net income (loss) attributable to TransUnion	\$ 284.4	\$(206.2)	\$ 266.3	\$	490.5	nm	\$	(472.4)	nm		
Discontinued operations, net of tax		0.7	(17.4)		(0.7)	(100.0)%		18.1	nm		
Income (loss) from continuing operations attributable to TransUnion	\$ 284.4	\$(205.4)	\$ 248.9	\$	489.8	nm	\$	(454.3)	nm		
Net interest expense	236.7	267.5	226.2		(30.8)	(11.5)%		41.3	18.3 %		
Provision for income taxes	98.8	44.7	118.9		54.1	nm		(74.2)	(62.4)%		
Depreciation and amortization	537.8	524.4	519.0		13.3	2.5 %		5.4	1.0 %		
EBITDA	\$1,157.7	\$ 631.2	\$1,113.1	\$	526.5	83.4 %	\$	(481.9)	(43.3)%		
Adjustments to EBITDA:											
Stock-based compensation	121.2	100.6	81.1		20.6	20.5 %		19.5	24.0 %		
Goodwill impairment ¹	_	414.0	_		(414.0)	(100.0)%		414.0	nm		
Mergers and acquisitions, divestitures and business optimization ²	26.5	34.6	50.7		(8.1)	(23.4)%		(16.1)	(31.8)%		
Accelerated technology investment ³	84.2	70.6	54.0		13.6	19.3 %		16.6	30.7 %		
Operating model optimization program ⁴	94.8	77.6			17.2	22.2 %		77.6	nm		
Net other ⁵	21.8	15.2	46.1		6.6	43.5 %		(30.9)	(67.0)%		
Total adjustments to EBITDA	\$ 348.7	\$ 712.5	\$231.9	\$	(363.8)	(51.1)%	\$	480.6	nm		
Consolidated Adjusted EBITDA	\$1,506.3	\$1,343.7	\$1,344.9	\$	162.6	12.1 %	\$	(1.3)	(0.1)%		
Net income (loss) attributable to TransUnion margin	6.8 %	(5.4)%	7.2 %			12.2 %			(12.6)%		
Consolidated Adjusted EBITDA Margin ⁶	36.0 %	35.1 %	36.3 %			0.9 %			(1.2)%		

nm: not meaningful

As a result of displaying amounts in millions, rounding differences may exist in the table above.

- 1. During the year ended December 31, 2023, we recorded a goodwill impairment of \$414.0 million related to our United Kingdom reporting unit in our International segment.
- 2. Mergers and acquisitions, divestitures and business optimization consisted of the following adjustments:

	Years Ended December 31,							
		2024		2023		2022		
Transaction and integration costs	\$	11.2	\$	30.9	\$	56.9		
Fair value and impairment adjustments		8.4		1.6		4.0		
Post-acquisition adjustments		7.0		4.3		(3.4)		
Transition services agreement income		_		(2.5)		(6.8)		
Loss on business disposal				0.3		_		
Total mergers and acquisitions, divestitures and business optimization	\$	26.5	\$	34.6	\$	50.7		

3. Represents expenses associated with our accelerated technology investment to migrate to the cloud. There are three components of the accelerated technology investment: (i) building foundational capabilities which includes establishing a modern, API-based and services-oriented software architecture, (ii) the migration of each application and customer data to the new enterprise platform, including the redundant software costs during the migration period, as well as the efforts to decommission the legacy system, and (iii) program

enablement, which includes dedicated resources to support the planning and execution of the program. The amounts for each category of cost are as follows:

	Years Ended December 31,								
	2	2024		2023		2022			
Foundational Capabilities	\$	35.7	\$	35.8	\$	34.1			
Migration Management		43.2		29.6		14.6			
Program Enablement		5.4		5.2		5.3			
Total accelerated technology investment	\$	84.2	\$	70.6	\$	54.0			

4. Operating model optimization consisted of the following adjustments:

	Years Ended December 31,									
	2024			2023		2022				
Employee separation	\$	24.7	\$	71.9	\$	_				
Facility exit		42.1		3.4		_				
Business process optimization		28.0		2.3		_				
Total operating model optimization	\$	94.8	\$	77.6	\$					

5. Net other consisted of the following adjustments:

	Years Ended December 31,							
		2024		2023		2022		
Deferred loan fee expense from debt prepayments and refinancings	\$	17.8	\$	9.3	\$	9.3		
Other debt financing expenses		2.4		2.2		1.7		
Currency remeasurement on foreign operations		2.1		4.8		6.3		
Legal and regulatory expenses, net						28.4		
Other non-operating (income) and expense		(0.5)		(1.0)		0.3		
Total other adjustments	\$	21.8	\$	15.2	\$	46.1		

6. Consolidated Adjusted EBITDA Margin is calculated by dividing Consolidated Adjusted EBITDA by total revenue.

Consolidated Adjusted EBITDA

For 2024, Consolidated Adjusted EBITDA increased \$162.6 million compared 2023, primarily due to an increase in revenue and the realization of cost savings from the transformation plan, partially offset by higher product costs and higher incentive compensation compared to 2023.

Adjusted EBITDA Margin increased in 2024 primarily due to an increase in high margin revenue and realization of cost savings from the transformation plan.

For 2023, Consolidated Adjusted EBITDA was relatively consistent, as the increase in cost of services and selling, general and administrative expenses, excluding the operating expenses added back, was mostly offset by the increase in revenue, as disclosed in the discussions and tables above.

Adjusted EBITDA Margin decreased in 2023 primarily due to lower margins from our recent acquisitions and higher product and fulfillment costs in our U.S. Markets segment.

Adjusted Net Income and Adjusted Earnings Per Share

	,	Yea	ars Ended	l						
	Ι	Dec	ember 31	,			2024 vs.	. 2023	2023 vs.	2022
	2024		2023		2022		\$	%	\$	%
Reconciliation of net income (loss) attributable to TransUnion to Adjusted Net Income:										
Net income (loss) attributable to TransUnion	\$ 284.4	\$	(206.2)	\$	266.3	\$	490.5	nm	\$ (472.4)	nm
Discontinued operations, net of tax			0.7		(17.4)		(0.7)	(100.0)%	18.1	nm
Income (loss) from continuing operations attributable to TransUnion	\$ 284.4	\$	(205.4)	\$	248.9	\$	489.8	nm	\$ (454.3)	nm
Pre-tax adjustments:										
Amortization of certain intangible assets	286.1		293.6		306.7		(7.5)	(2.5)%	(13.1)	(4.3)%
Stock-based compensation	121.2		100.6		81.1		20.6	20.5 %	19.5	24.0 %
Goodwill impairment ¹	_		414.0		_		(414.0)	(100.0)%	414.0	nm
Mergers and acquisitions, divestitures and business optimization ²	26.5		34.6		50.7		(8.1)	(23.4)%	(16.1)	(31.7)%
Accelerated technology investment ³	84.2		70.6		54.0		13.6	19.3 %	16.6	30.8 %
Operating model optimization program ⁴	94.8		77.6				17.2	22.2 %	77.6	nm
Net other ⁵	20.2		14.0		44.3		6.2	44.1 %	(30.3)	(68.4)%
Total adjustments before income tax items	\$ 633.1	\$	1,005.0	\$	536.8	\$	(371.9)	(37.0)%	\$ 468.2	87.2 %
Total adjustments for income taxes ⁶	\$ (148.7)	\$	(144.1)	\$	(86.8)	\$	(4.6)	3.2 %	\$ (57.3)	66.0 %
Adjusted Net Income	\$ 768.8	\$	655.4	\$	698.9	\$	113.4	17.3 %	\$ (43.5)	(6.2)%
Weighted-average shares outstanding:										
	194.4		193.4		192.5		1.1	0.5 %	0.9	0.5 %
Basic										
Diluted	196.7		194.7		193.1		2.0	1.0 %	1.6	0.8 %
Adjusted Earnings per Share:										
Basic	\$ 3.95	\$	3.39	\$	3.63	\$	0.56	16.7 %	\$ (0.24)	(6.7)%
Diluted	\$ 3.91	\$	3.37	\$	3.62	\$	0.54	16.1 %	\$ (0.25)	(7.0)%

nm: not meaningful

	Years Ended December 31,					
		2024	2023			2022
Reconciliation of diluted earnings (loss) per share from net income (loss) attributable to TransUnion to Adjusted Diluted Earnings per Share:						
Diluted earnings per common share from:						
Net income (loss) attributable to TransUnion	\$	1.45	\$	(1.07)	\$	1.38
Discontinued operations, net of tax						(0.09)
Income (loss) from continuing operations attributable to TransUnion	\$	1.45	\$	(1.06)	\$	1.29
Adjustments before income tax items:						
Amortization of certain intangible assets		1.45		1.51		1.59
Stock-based compensation		0.62		0.52		0.42
Goodwill impairment ¹		_		2.13		
Mergers and acquisitions, divestitures and business optimization ²		0.13		0.18		0.26
Accelerated technology investment ³		0.43		0.36		0.28
Operating model optimization program ⁴		0.48		0.40		
Net other ⁵		0.10		0.07		0.23
Total adjustments before income tax items	\$	3.22	\$	5.16	\$	2.78
Total adjustments for income taxes ⁶		(0.76)		(0.74)		(0.45)
Impact of additional dilutive shares ⁷		_		0.02		_
Adjusted Diluted Earnings per Share	\$	3.91	\$	3.37	\$	3.62

As a result of displaying amounts in millions, rounding differences may exist in the table above and footnotes below.

- 1. During the year ended December 31, 2023, we recorded a goodwill impairment of \$414.0 million related to our United Kingdom reporting unit in our International segment.
- 2. Mergers and acquisitions, divestitures and business optimization consisted of the following adjustments:

	Years Ended December 31,							
		2024		2023	2022			
Transaction and integration costs	\$	11.2	\$	30.9	\$	56.9		
Fair value and impairment adjustments		8.4		1.6		4.0		
Post-acquisition adjustments		7.0		4.3		(3.4)		
Transition services agreement income		_		(2.5)		(6.8)		
Loss on business disposal				0.3		_		
Total mergers and acquisitions, divestitures and business optimization	\$	26.5	\$	34.6	\$	50.7		

3. Represents expenses associated with our accelerated technology investment to migrate to the cloud. There are three components of the accelerated technology investment: (i) building foundational capabilities which includes establishing a modern, API-based and services-oriented software architecture, (ii) the migration of each application and customer data to the new enterprise platform, including the redundant software costs during the migration period, as well as the efforts to decommission the legacy system, and (iii) program enablement, which includes dedicated resources to support the planning and execution of the program. The amounts for each category of cost are as follows:

	 Years Ended December 31,						
	2024	2024 2023			2022		
Foundational Capabilities	\$ 35.7	\$	35.8	\$	34.1		
Migration Management	43.2		29.6		14.6		
Program Enablement	 5.4	_	5.2	_	5.3		
Total accelerated technology investment	\$ 84.2	\$	70.6	\$	54.0		

4. Operating model optimization consisted of the following adjustments:

	Years Ended December 31,							
		2024	2023			2022		
Employee separation	\$	24.7	\$	71.9	\$	_		
Facility exit		42.1		3.4				
Business process optimization		28.0		2.3		_		
Total operating model optimization	\$	94.8	\$	77.6	\$			

5. Net other consisted of the following adjustments:

	Years Ended December 31,						
		2024		2023		2022	
Deferred loan fee expense from debt prepayments and refinancing	\$	17.8	\$	9.3	\$	9.3	
Currency remeasurement on foreign operations		2.1		4.8		6.3	
Legal and regulatory expenses, net				_		28.4	
Other non-operating (income) and expense		0.3		_		0.3	
Total other adjustments	\$	20.2	\$	14.0	\$	44.3	

- 6. Total adjustments for income taxes represents the total of adjustments discussed to calculate the Adjusted Provision for Income Taxes.
- 7. Diluted share counts for Adjusted Diluted Earnings per Share includes an additional 1.3 million of dilutive securities for the year ended December 31, 2023, which are not included in GAAP diluted weighted-average shares outstanding due to the Company's net loss position for the year ended December 31, 2023.

Adjusted Net Income

For 2024, Adjusted Net Income increased primarily due to an increase in operating income and a decrease in net interest expense, partially offset by an increase in the Adjusted Provision for Income Taxes.

For 2023, Adjusted Net Income decreased slightly, due primarily to an increase in cost of services and selling, general and administrative expenses and net interest expense, partially offset by the increase in revenue.

Adjusted Provision for Income Taxes and Effective Tax Rate

	Years Ended December 31,								
		2024		2023		2022			
Income (loss) from continuing operations before income taxes	\$	401.1	\$	(145.3)	\$	383.0			
Total adjustments before income tax items from Adjusted Net Income table above		633.1		1,005.0		536.8			
Adjusted income from continuing operations before income taxes	\$	1,034.3	\$	859.7	\$	919.8			
Reconciliation of Provision for income taxes to Adjusted Provision for Income Taxes:									
Provision for income taxes	\$	(98.8)	\$	(44.7)	\$	(118.9)			
Adjustments for income taxes:									
Tax effect of above adjustments		(145.5)		(135.6)		(117.4)			
Eliminate impact of excess tax (benefit) expenses for stock-based compensation		(1.5)		3.0		(5.0)			
Other ¹		(1.7)		(11.5)		35.6			
Total adjustments for income taxes	\$	(148.7)	\$	(144.1)	\$	(86.8)			
Adjusted Provision for Income Taxes	\$	(247.6)	\$	(188.8)	\$	(205.7)			
Effective tax rate		24.6 %		(30.8)%		31.0 %			
Adjusted Effective Tax Rate		23.9 %		22.0 %		22.4 %			

As a result of displaying amounts in millions, rounding differences may exist in the table above.

1. Other adjustments for income taxes include:

	Years Ended December 31,									
		2024		2023		2022				
Deferred tax adjustments	\$	13.8	\$	(12.9)	\$	6.7				
Valuation allowance adjustments		(12.7)		4.0		25.7				
Return to provision, audit adjustments, and reserves related to prior periods		(2.3)		(1.0)		(0.3)				
Other adjustments		(0.5)		(1.6)		3.5				
Total other adjustments	\$	(1.7)	\$	(11.5)	\$	35.6				

Adjusted Provision for Income Taxes

We reported an adjusted tax rate of 23.9%, 22.0% and 22.4%, for 2024, 2023 and 2022, respectively, each of which is higher than the 21.0% U.S. federal corporate statutory rate due primarily to increases for state taxes and foreign withholding taxes, partially offset by foreign taxes in jurisdictions which have tax rates lower than the U.S. federal corporate statutory rate and the research and development credit.

Leverage Ratio

	Years Ended December 31,								
		2024		2023		2022			
Reconciliation of net income (loss) attributable to TransUnion to Consolidated Adjusted EBITDA:									
Net income (loss) attributable to TransUnion	\$	284.4	\$	(206.2)	\$	266.3			
Discontinued operations, net of tax		_		0.7		(17.4)			
Income (loss) from continuing operations attributable to TransUnion	\$	284.4	\$	(205.4)	\$	248.9			
Net interest expense		236.7		267.5		226.2			
Provision for income taxes		98.8		44.7		118.9			
Depreciation and amortization		537.8		524.4		519.0			
EBITDA	\$	1,157.7	\$	631.2	\$	1,113.1			
Adjustments to EBITDA:									
Stock-based compensation	\$	121.2	\$	100.6	\$	81.1			
Goodwill impairment ¹		_		414.0		_			
Mergers and acquisitions, divestitures and business optimization ²		26.5		34.6		50.7			
Accelerated technology investment ³		84.2		70.6		54.0			
Operating model optimization program ⁴		94.8		77.6		_			
Net other ⁵		21.8		15.2		46.1			
Total adjustments to EBITDA	\$	348.7	\$	712.5	\$	231.9			
Consolidated Adjusted EBITDA		1,506.3		1,343.7		1,344.9			
Adjusted EBITDA for Pre-Acquisition Period ⁶		_				6.4			
Leverage Ratio Adjusted EBITDA	\$	1,506.3	\$	1,343.7	\$	1,351.3			
Total debt	\$	5,147.2	\$	5,340.4	\$	5,670.1			
Less: Cash and cash equivalents		679.5		476.2		585.3			
Net Debt	\$	4,467.8	\$	4,864.2	\$	5,084.8			
Ratio of Net Debt to Net income (loss) attributable to TransUnion		15.7		(23.6)		19.1			
Leverage Ratio ⁷		3.0		3.6		3.8			

As a result of displaying amounts in millions, rounding differences may exist in the table above.

- 1. During the year ended December 31, 2023, we recorded a goodwill impairment of \$414.0 million related to our United Kingdom reporting unit in our International segment.
- 2. Mergers and acquisitions, divestitures and business optimization consisted of the following adjustments:

	Years Ended December 31,									
		2024		2023	2022					
Transaction and integration costs	\$	11.2	\$	30.9	\$	56.9				
Fair value and impairment adjustments		8.4		1.6		4.0				
Post-acquisition adjustments		7.0		4.3		(3.4)				
Transition services agreement income		_		(2.5)		(6.8)				
Loss on business disposal				0.3		_				
Total mergers and acquisitions, divestitures and business optimization	\$	26.5	\$	34.6	\$	50.7				

3. Represents expenses associated with our accelerated technology investment to migrate to the cloud. There are three components of the accelerated technology investment: (i) building foundational capabilities which includes establishing a modern, API-based and services-oriented software architecture, (ii) the migration of each application and customer data to the new enterprise platform including the redundant software costs

during the migration period, as well as the efforts to decommission the legacy system, and (iii) program enablement, which includes dedicated resources to support the planning and execution of the program. The amounts for each category of cost are as follows:

	Years Ended December 31,								
	2	2024		2023	2022				
Foundational Capabilities	\$	35.7	\$	35.8	\$	34.1			
Migration Management		43.2		29.6		14.6			
Program Enablement		5.4		5.2		5.3			
Total accelerated technology investment	\$	84.2	\$	70.6	\$	54.0			

4. Operating model optimization consisted of the following adjustments:

	Years Ended December 31,									
		2024	2023			2022				
Employee separation	\$	24.7	\$	71.9	\$	_				
Facility exit		42.1		3.4						
Business process optimization		28.0		2.3		_				
Total operating model optimization	\$	94.8	\$	77.6	\$					

5. Net other consisted of the following adjustments:

	Years Ended December 31,								
	- 2	2024	2023		2022				
Deferred loan fee expense from debt prepayments and refinancing	\$	17.8	\$	9.3	\$	9.3			
Other debt financing expenses		2.4		2.2		1.7			
Currency remeasurement on foreign operations		2.1		4.8		6.3			
Legal and regulatory expenses, net						28.4			
Other non-operating (income) and expense		(0.5)		(1.0)		0.3			
Total other adjustments	\$	21.8	\$	15.2	\$	46.1			

- 6. For years in which we made significant acquisitions, we have included a twelve-month period of adjusted EBITDA including Adjusted EBITDA for the period prior to our acquisition. The year ended December 31, 2022 includes the three months of Adjusted EBITDA related to Argus prior to our acquisition in April 2022.
- 7. We define Leverage Ratio as net debt divided by Leverage Ratio Adjusted EBITDA as shown in the table above.

Our Leverage Ratio decreased in 2024 compared with 2023 due primarily to a decrease in debt due to our continued prepayments and scheduled repayments made throughout the year, an increase in cash due to cash generated from operations and an increase in Adjusted EBITDA. Our Leverage Ratio decreased in 2023 compared with 2022 due primarily to a decrease in debt due to our prepayments and scheduled repayments made throughout the year, partially offset by a decrease in Adjusted EBITDA and a corresponding decrease in cash used to make the debt payments, which was partially offset by cash generated from operations.

Liquidity and Capital Resources

Overview

Our principal sources of liquidity are cash flows provided by operating activities, cash and cash equivalents on hand, and our Senior Secured Revolving Line of Credit. Our principal uses of liquidity are working capital, capital expenditures, debt service and other capital structure obligations, business acquisitions, dividends, and other general corporate purposes. We believe our cash on hand, cash generated from operations, and funds available under the Senior Secured Revolving Line of Credit will be sufficient to fund our planned capital expenditures, debt service and other capital structure obligations, business acquisitions, dividends, and operating needs for the foreseeable future. Our ability to maintain adequate liquidity for our operations in the future is dependent upon a number of factors, including our revenue, macroeconomic conditions, our ability to contain costs, including capital expenditures, and to collect accounts receivable, and various other factors, many of which are beyond our control. We will continue to monitor our liquidity position and may elect to raise funds through debt or equity financing in the future to fund significant investments or acquisitions that are consistent with our growth strategy.

Cash and cash equivalents totaled \$679.5 million and \$476.2 million at December 31, 2024 and 2023, respectively, of which \$432.2 million and \$356.4 million was held outside the United States in each respective period. As of December 31, 2024, we had no outstanding balance under the Senior Secured Revolving Credit Facility and \$1.2 million of outstanding letters of credit and an available borrowing balance of \$598.8 million.

We also have the ability to request incremental loans on the same terms under the existing Senior Secured Credit Facility up to the greater of an additional \$1,000.0 million and 100% of Consolidated EBITDA. In addition, as long as the senior secured net leverage ratio does not exceed 4.25-to-1, we may incur additional incremental loans, subject to certain additional conditions and commitments by existing or new lenders to fund any additional borrowings.

Each year, we may be required to make additional principal payments on the Senior Secured Term Loan B based on excess cash flows of the prior year, as defined in our credit agreement. There were no excess cash flows for 2024 and therefore no additional payment will be required in 2025. See Part II, Item 8, "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 13, "Debt," for additional information about our debt.

With certain exceptions, the Senior Secured Credit Facility obligations are secured by a first-priority security interest in substantially all of the assets of Trans Union LLC, including its investments in subsidiaries. The Senior Secured Credit Facility contains various restrictions and nonfinancial covenants, along with a senior secured net leverage ratio test. The nonfinancial covenants include restrictions on dividends, investments, dispositions, future borrowings and other specified payments, as well as additional reporting and disclosure requirements. The senior secured net leverage test must be met as a condition to incur additional indebtedness, make certain investments, and may be required to make certain restricted payments. The senior secured net leverage ratio must not exceed 5.5-to-1 at any such measurement date.

We paid dividends of \$0.42 per share in 2024, totaling \$82.7 million. Dividends declared accrue to outstanding restricted stock units and are paid to employees as dividend equivalents when the restricted stock units vest. While we currently expect to continue to pay quarterly dividends, any determination to pay dividends in the future will be at the discretion of our Board and will depend on a number of factors, including our liquidity, results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors that our Board deems appropriate. We currently have capacity and intend to continue to pay a quarterly dividend, subject to approval by our Board.

On February 11, 2025, our Board authorized the repurchase of up to \$500.0 million of our common stock. This new share repurchase authorization replaces all previous authorizations.

We have no obligation to repurchase additional shares, and the timing, actual number and value of the shares that are repurchased, if any, will be at the discretion of management and will depend on a number of factors, including market conditions, the cost of repurchasing shares, the availability of alternative investment opportunities, liquidity, and other factors deemed appropriate. Repurchases may be suspended, terminated or modified at any time for any reason and the share repurchase program does not have an expiration date. Any repurchased shares will be retired and returned to the status of authorized but unissued shares of the Company.

Sources and Uses of Cash

	Years Ended December 31,							Cha	ange	
(dollars in millions)	2024 2023 202		4 2023			2024 vs. 2022 2023			2	023 vs. 2022
Cash provided by operating activities	\$	832.5	\$	645.4	\$	297.2	\$	187.1	\$	348.2
Cash used in investing activities		(307.4)		(318.9)		(723.9)		11.5		405.0
Cash used in financing activities		(308.7)		(438.8)		(820.5)		130.1		381.7
Effect of exchange rate changes on cash and cash equivalents		(13.1)		3.2		(9.9)		(16.3)		13.1
Net change in cash and cash equivalents	\$	203.3	\$	(109.1)	\$ (1,257.1)	\$	312.4	\$	1,148.0

Operating Activities

For 2024, the increase in cash provided by operating activities was primarily due to improved operating performance and lower net interest expense, partially offset by employee separation payments and a penalty paid for the early termination of a facility lease, both of which were in connection with our operating model optimization program. For 2023, the increase in cash provided by operating activities was due primarily to taxes paid in 2022 on the gain from the divestiture of our healthcare business and lower bonus and commission payments in the current year, partially offset by an increase in interest expense.

Investing Activities

For 2024, the decrease in cash used in investing activities was primarily due to a decrease in investments in nonconsolidated affiliates. For 2023, the decrease in cash used in investing activities was due primarily to cash used for acquisitions of \$508.1 million in 2022, partially offset by \$103.6 million of proceeds from the sale of discontinued operations.

Financing Activities

For 2024, the decrease in cash used in financing activities was due primarily to a decrease in debt payments. For 2023, the decrease in cash used in financing activities was due primarily to a decrease in debt payments and cash used to pay employee taxes on restricted stock.

Capital Expenditures

We make capital expenditures to grow our business by developing new and enhanced capabilities, to increase the effectiveness and efficiency of the organization and to reduce risks. We make capital expenditures for product development, disaster recovery, security enhancements, regulatory compliance, and the replacement and upgrade of existing equipment at the end of its useful life.

For 2024, cash paid for capital expenditures increased \$5.1 million to \$315.8 million. For 2023, cash paid for capital expenditures increased \$12.6 million to \$310.7 million. Capital expenditures as a percent of revenue represented 7.5% and 8.1% for 2024 and 2023, respectively.

Debt

Hedges

Effective May 31, 2023, we amended all our interest rate swaps to replace the reference rate from LIBOR to Term SOFR. We applied the practical expedient for reference rate reform to continue to apply hedge accounting to the existing relationships.

In 2024, we entered into interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loan or similar replacement debt. The swaps commenced on December 31, 2024, and expire on December 31, 2027, with a current aggregate notional amount of \$1,100.0 million that amortizes each quarter beginning the first quarter 2025. The swaps require us to pay fixed rates varying between 3.0650% and 3.9925% in exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

On November 16, 2022, we entered into interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loan or similar replacement debt. The new swaps commenced on December 30, 2022, and expired on December 31, 2024. We designated these swap agreements as cash flow hedges.

On December 23, 2021, we entered into interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loan or similar replacement debt. The swaps commenced on December 31, 2021, and expire on December 31, 2026, with a current aggregate notional amount of \$1,552.0 million that amortizes each quarter. The swaps require us to pay fixed rates varying between 1.3800% and 1.3915% in

exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

On March 10, 2020, we entered into two tranches of interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loans or similar replacement debt. The first swap commenced on June 30, 2020, and expired on June 30, 2022. The second swap commences on June 30, 2022, and expires on June 30, 2025, with a current aggregate notional amount of \$1,060.0 million that amortizes each quarter after it commences. The second swap requires us to pay fixed rates varying between 0.8680% and 0.8800% in exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

Effect of Certain Debt Covenants

A breach of any of the covenants under the agreements governing our debt could limit our ability to borrow funds under the Senior Secured Revolving Line of Credit and could result in a default under the Senior Secured Credit Facility. Upon the occurrence of an event of default under the Senior Secured Credit Facility, the lenders could elect to declare all amounts then outstanding to be immediately due and payable, and the lenders could terminate all commitments to extend further credit. If we were unable to repay the amounts declared due, the lenders could proceed against any collateral granted to them to secure that indebtedness.

With certain exceptions, the Senior Secured Credit Facility obligations are secured by a first-priority security interest in substantially all of the assets of Trans Union LLC, including its investment in subsidiaries. The Senior Secured Credit Facility contains various restrictions and nonfinancial covenants, along with a senior secured net leverage ratio test. The nonfinancial covenants include restrictions on dividends, investments, dispositions, future borrowings and other specified payments, as well as additional reporting and disclosure requirements. The senior secured net leverage test must be met as a condition to incur additional indebtedness, make certain investments, and may be required to make certain restricted payments. The senior secured net leverage ratio must not exceed 5.5-to-1 at any such measurement date. Under the terms of the Senior Secured Credit Facility, TransUnion may make dividend payments up to the greater of \$100 million or 10.0% of Consolidated EBITDA per year, or an unlimited amount provided that no default or event of default exists and so long as the total net leverage ratio does not exceed 4.75-to-1. As of December 31, 2024, we were in compliance with all debt covenants.

Our ability to meet our liquidity needs or to pay dividends on our common stock depends on our subsidiaries' earnings, the terms of their indebtedness, and other contractual restrictions.

For additional information about our debt and hedge, see Part II, Item 8, "Financial Statements and Supplementary Data — Notes to Consolidated Financial Statements," Note 13, "Debt."

Contractual Obligations

Refer to Part II, Item 8, "Financial Statements and Supplementary Data — Notes to Consolidated Financial Statements," Note 13, "Debt," Note 14, "Leases" and Note 20, "Commitments," for information about our long-term debt obligations, noncancelable lease obligations, and noncancelable purchase obligations as of December 31, 2024.

Application of Critical Accounting Estimates

We prepare our consolidated financial statements in conformity with GAAP. See Part II, Item 8, "Financial Statements and Supplementary Data — Notes to Consolidated Financial Statements," Note 1, "Significant Accounting Policies," for additional information about our significant accounting policies that require us to make certain judgments and estimates in reporting our operating results and our assets and liabilities. The following paragraphs describe the accounting policies that require significant judgment and estimates due to inherent uncertainty or complexity.

Goodwill

As of December 31, 2024, our Consolidated Balance Sheet included goodwill of \$5,144.3 million. We test goodwill for impairment on an annual basis in the fourth quarter and monitor throughout the year for impairment triggering events that indicate that the carrying value of one or more of our reporting units exceeds its fair value. We have the option to first perform a qualitative analysis to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying value. If the qualitative analysis indicates that an impairment is more likely than not for any reporting unit, we perform a quantitative impairment test for that reporting unit. We also have the option to bypass the qualitative analysis for any reporting unit and proceed directly to performing a quantitative impairment test.

Our quantitative impairment test consists of a fair value calculation for each reporting unit that combines an income approach, using the discounted cash flow method, and a market approach, using the guideline public company method. The quantitative impairment test requires the application of a number of significant assumptions, including estimates of future revenue growth rates, EBITDA margins, discount rates, and market multiples. The projected future revenue growth rates and EBITDA margins, and the resulting projected cash flows of each reporting unit are based on historical experience and internal operating plans

reviewed by management, extrapolated over the forecast period. Discount rates are determined using a weighted average cost of capital adjusted for risk factors specific to each reporting unit. Market multiples are based on the Guideline Public Company Method using comparable publicly traded company multiples of EBITDA for a group of benchmark companies.

We believe the assumptions that we use in our impairment analysis are reasonable and consistent with assumptions that would be used by other marketplace participants. However, such assumptions are inherently uncertain, and a change in assumptions could change the estimated fair values of our reporting units and, therefore, future impairment charges could be required, which could be material to the consolidated financial statements. In order to ensure the assumptions used in the analysis are reasonable, we reconcile the sum of the fair value of the reporting units to our market capitalization adjusted for an estimated control premium.

When we perform a quantitative impairment test, we engage a third-party valuation specialist to assist in our analysis of the fair value of our reporting units. All judgments, significant assumptions and estimates, and forecasts are either provided by or reviewed by us. While we choose to utilize a third-party valuation specialist for assistance, the fair value analyses reflect the conclusions of management and not those of any third party.

Third Quarter 2023 Interim Impairment Test for United Kingdom Reporting Unit

During the three months ended September 30, 2023, the worsening macroeconomic conditions from inflationary pressures and rising interest rates increasingly impacted our United Kingdom business for the third quarter and the near-term outlook, creating a triggering event that required an interim impairment assessment which resulted in a goodwill impairment of \$414.0 million for our United Kingdom reporting unit.

Annual Impairment Test

For our 2024 annual goodwill impairment test, we performed a qualitative test on certain reporting units and elected to bypass the qualitative test and perform a quantitative test for other reporting units. The results of our qualitative tests did not identify any factors that suggest it was more likely than not the fair value of any of these reporting units was less than its carrying value For all of the reporting units subject to a quantitative test, including the United Kingdom reporting unit, the fair value exceeded the carrying value by more than 10%.

Legal Contingencies

We are routinely named as defendants in, or parties to, various legal actions and proceedings relating to our current or past business operations. These actions generally assert claims for violations of federal or state credit reporting, consumer protection or privacy laws, or common law claims related to the unfair treatment of consumers, and may include claims for substantial or indeterminate compensatory or punitive damages, or injunctive relief, and may seek business practice changes. We believe that most of these claims are either without merit or we have valid defenses to the claims, and we vigorously defend these matters or seek non-monetary or small monetary settlements, if possible. However, due to the uncertainties inherent in litigation, we cannot predict the outcome of each claim in each instance.

In the ordinary course of business, we also are subject to governmental and regulatory examinations, information-gathering requests, investigations and proceedings (both formal and informal), certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. In connection with formal and informal inquiries by these regulators, we routinely receive requests, subpoenas and orders seeking documents, testimony, and other information in connection with various aspects of our activities.

In view of the inherent unpredictability of legal and regulatory matters, particularly where the damages sought are substantial or indeterminate or when the proceedings or investigations are in the early stages, we cannot determine with any degree of certainty the timing or ultimate resolution of legal and regulatory matters or the eventual loss, fines or penalties, if any, that may result from such matters. We establish reserves for legal and regulatory matters when those matters present loss contingencies that are both probable and can be reasonably estimated. However, for certain of the matters, we are not able to reasonably estimate our exposure because damages have not been specified and (i) the proceedings are in early stages, (ii) there is uncertainty as to the likelihood of a class being certified or the ultimate size of the class, (iii) there is uncertainty as to the outcome of similar matters pending against our competitors, (iv) there are significant factual issues to be resolved, and/or (v) there are legal issues of a first impression being presented. The actual costs of resolving legal and regulatory matters, however, may be substantially higher than the amounts reserved for those matters, and an adverse outcome in certain of these matters could have a material adverse effect on our consolidated financial statements in particular quarterly or annual periods. We accrue amounts for certain legal and regulatory matters for which losses were considered to be probable of occurring based on our best estimate of the most likely outcome. It is reasonably possible actual losses could be significantly different from our current estimates. In addition, there are some matters for which it is reasonably possible that a loss will occur, however we cannot estimate a range of the potential losses for these matters. Legal fees incurred in connection with ongoing legal and regulatory matters are considered a period cost and are expensed as incurred.

To reduce our exposure to an unexpected significant monetary award resulting from an adverse judicial decision, we maintain insurance that we believe is appropriate and adequate based on our historical experience. We regularly advise our insurance carriers of the claims, threatened or pending, against us in legal and regulatory matters and generally receive a reservation of rights letter from the carriers when such claims exceed applicable deductibles. We are not aware of any significant monetary claim that has been asserted against us, except for the active matters with the CFPB, that would not have some level of coverage by insurance after the relevant deductible, if any, is met.

As of December 31, 2024 and 2023, we accrued \$123.5 million and \$147.8 million, respectively, for anticipated claims. These amounts were recorded in other accrued liabilities in the Consolidated Balance Sheets and the associated expenses were recorded in selling, general and administrative expenses in the Consolidated Statements of Operations. Legal fees incurred in connection with ongoing litigation are considered period costs and are expensed as incurred.

See Part II, Item 8 "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 21, "Contingencies," for further information.

Income Taxes

As of December 31, 2024, our Consolidated Balance Sheet included non-current deferred tax liabilities of \$415.3 million. Certain deferred tax assets, including net operating loss and foreign tax credit carryforwards, may be deducted from future taxable income in computing our federal income tax liability. Our deferred tax liability includes deferred tax assets and liabilities resulting from net operating losses, tax credit carryforwards and temporary differences.

We have made certain judgments and estimates to determine various tax amounts recorded, including future tax rates, future taxable income, whether it is more likely than not a tax position will be sustained, and the amount of the unrecognized tax benefit to record. We have total deferred tax assets of \$403.2 million, net of valuation allowances of \$93.4 million. Our estimate of the amount of the deferred tax asset we can realize requires significant assumptions about projected revenues and income that are impacted by future market and economic conditions. We believe the judgments and estimates used are reasonable, but events may arise that were not anticipated and the outcome of tax audits may differ significantly from what is expected.

See Part II, Item 8 "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 16, "Income Taxes," for further information.

Recent Accounting Pronouncements

For information about recent accounting pronouncements and the potential impact on our consolidated financial statements, see Part II, Item 8, "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 1, "Significant Accounting Policies."

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the normal course of business, we are exposed to market risk, primarily from changes in variable interest rates and foreign currency exchange rates, which could impact our results of operations and financial position. We manage the exposure to this market risk through our regular operating and financing activities. We may use derivative financial instruments, such as foreign currency and interest rate hedges, but only as a risk management tool and not for speculative or trading purposes.

Interest Rate Risk

Our Senior Secured Credit Facility consists of senior secured term loans and a \$600.0 million Senior Secured Revolving Line of Credit. The variable interest rates on these borrowings are based, at our election, on SOFR or an alternate base rate, subject to floors, plus applicable margins based on applicable net leverage ratios. As of December 31, 2024, essentially all of our outstanding debt was variable-rate debt, and had a weighted-average interest rate of 6.13% and a weighted-average life of 5.9 years. Approximately 71.6% of our variable-rate debt is hedged with interest rate swaps. During 2024, a 10% change in the average Term SOFR rates utilized in the calculation of our actual interest expense, would have increased our interest expense by approximately \$7.2 million for the year.

Based on the amount of unhedged outstanding variable-rate debt, we have a material exposure to interest rate risk. In the future our exposure to interest rate risk may change due to changes in the amount borrowed, changes in interest rates, or changes in the amount we have hedged. The amount of our outstanding debt, and the ratio of fixed-rate debt to variable-rate debt, can be expected to vary as a result of future business requirements, market conditions or other factors.

See Part II, Item 8, "Financial Statements and Supplementary Data - Notes to Consolidated Financial Statements," Note 13, "Debt," for additional information about interest rates on our debt.

Foreign Currency Exchange Rate Risk

A substantial majority of our revenue, expense and capital expenditure activities are transacted in U.S. dollars. However, we transact business in a number of foreign currencies, including British pounds sterling, the South African rand, the Canadian dollar, the Indian rupee, the Colombian peso and the Brazilian real. In reporting the results of our foreign operations, we benefit from a weaker U.S. dollar and are adversely affected by a stronger U.S. dollar relative to the foreign currencies.

We are required to translate the assets and liabilities of our foreign subsidiaries that are measured in foreign currencies at the applicable period-end exchange rate in our Consolidated Balance Sheets. We are required to translate revenue and expenses at the average exchange rates prevailing during the year in our Consolidated Statements of Operations. The resulting translation adjustment is included in other comprehensive income, as a component of stockholders' equity. Transaction gains and losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency are included in other income and (expense), net as incurred.

In 2024, revenue attributable to our International segment was \$958.4 million, and Adjusted EBITDA attributable to our International segment was \$425.5 million. A 10% change in the value of the U.S. dollar relative to a basket of the currencies for all foreign countries in which we had operations during 2024 would have changed our revenue by \$95.8 million and our Adjusted EBITDA by \$42.6 million. We derive an insignificant amount of international revenue and Adjusted EBITDA from our U.S. Markets segment.

A 10% change in the value of the U.S. dollar relative to a basket of currencies for all foreign countries in which we had operations would not have had a significant impact on our 2024 realized foreign currency transaction gains and losses.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of TransUnion

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of TransUnion and its subsidiaries (the "Company") as of December 31, 2024 and 2023, and the related consolidated statements of operations, of comprehensive income (loss), of stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2024, including the related notes and financial statement schedules listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2024 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

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

Revenue Recognition - Certain Financial Services and Emerging Verticals Revenues within the U.S. Markets Segment

As described in Notes 1 and 19 to the consolidated financial statements, for the year ended December 31, 2024, the Company's total revenue was \$4.2 billion, of which \$1.4 billion and \$1.2 billion relate to Financial Services and Emerging Verticals, within the U.S. Markets segment, respectively. The Company has contracts with two general groups of performance obligations; those that require the Company to stand ready to provide goods and services to a customer to use as and when requested ("Stand Ready Performance Obligations") and those that do not require the Company to stand ready ("Other Performance Obligations"). Most of the Company's Stand Ready Performance Obligations consist of a series of distinct goods and services that are substantially the same and have the same monthly pattern of transfer to its customers. The Company considers each month of service in this time series to be a distinct performance obligation and, accordingly, recognizes revenue over time. For a majority of these Stand Ready Performance Obligations, the total contractual price is variable because the Company's obligation is to process an unknown quantity of transactions, as and when requested by customers, over the contract period. Management allocates the variable price to each month of service using the time-series concept and recognizes revenue based on the most likely amount of consideration to which the Company will be entitled, which is generally the amount the Company has the right to invoice. This monthly amount can be based on the actual volume of units delivered or a guaranteed minimum, if higher. Occasionally the Company has contracts where the amount it will be entitled to for the transactions processed is uncertain, in which case management estimates the revenue based on what management considers to be the most likely amount of consideration the Company will be entitled to and adjust any estimates as facts and circumstances evolve.

The principal consideration for our determination that performing procedures relating to revenue recognition related to certain financial services and emerging verticals revenues within the U.S. Markets segment is a critical audit matter is a high degree of auditor effort in performing procedures related to the Company's revenue recognition.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over certain financial services and emerging verticals revenues within the U.S. Markets segment. These procedures also included, among others, (i) evaluating the revenue recognized on a sample basis by (a) obtaining and inspecting source documents, such as customer contracts, invoices, usage data, and cash receipts and (b) recalculating revenue recognized based on the terms of the related contract and usage data; and (ii) confirming a sample of outstanding customer invoice balances and, for confirmations not returned, obtaining and inspecting source documents, such as contracts, invoices, and subsequent cash receipts.

/s/ PricewaterhouseCoopers LLP

Chicago, Illinois February 13, 2025

We have served as the Company's auditor since 2020.

Consolidated Balance Sheets

(in millions, except per share data)

	De	December 31, 2024		cember 31, 2023
Assets				
Current assets:				
Cash and cash equivalents	\$	679.5	\$	476.2
Trade accounts receivable, net of allowance of \$19.9 and \$16.4		798.9		723.0
Other current assets		323.4		275.9
Total current assets		1,801.8		1,475.1
Property, plant and equipment, net of accumulated depreciation and amortization of $\$506.3$ and $\$804.4$		203.5		199.3
Goodwill		5,144.3		5,176.0
Other intangibles, net of accumulated amortization of \$2,294.5 and \$2,719.8		3,257.5		3,515.3
Other assets		577.7		739.4
Total assets	\$	10,984.8	\$	11,105.1
Liabilities and stockholders' equity				
Current liabilities:				
Trade accounts payable	\$	294.6	\$	251.3
Current portion of long-term debt		70.6		89.6
Other current liabilities		694.4		661.8
Total current liabilities		1,059.6		1,002.7
Long-term debt		5,076.6		5,250.8
Deferred taxes		415.3		592.9
Other liabilities		114.5		153.2
Total liabilities		6,666.0		6,999.6
Stockholders' equity:				
Preferred stock, \$0.01 par value; 100.0 million shares authorized; none issued or outstanding as of December 31, 2024 and 2023		_		_
Common stock, \$0.01 par value; 1.0 billion shares authorized at December 31, 2024 and December 31, 2023; 201.5 million and 200.0 million shares issued as of December 31, 2024 and December 31, 2023, respectively; and 194.9 million and 193.8 million shares outstanding as of December 31, 2024 and December 31, 2023, respectively	l	2.0		2.0
Additional paid-in capital		2,558.9		2,412.9
Treasury stock at cost; 6.6 million and 6.2 million shares at December 31, 2024 and December 31, 2023, respectively		(334.6)		(302.9)
Retained earnings		2,357.9		2,157.1
Accumulated other comprehensive loss		(367.2)		(260.9)
Total TransUnion stockholders' equity		4,217.0		4,008.2
Noncontrolling interests		101.8		97.3
Total stockholders' equity		4,318.8		4,105.5
Total liabilities and stockholders' equity	\$	10,984.8	\$	11,105.1

See accompanying notes to consolidated financial statements.

Consolidated Statements of Operations

(in millions, except per share data)

		Years	er 3	31,		
		2024		2023		2022
Revenue	\$	4,183.8	\$	3,831.2	\$	3,709.9
Operating expenses						
Cost of services (exclusive of depreciation and amortization below)		1,673.3		1,517.3		1,385.1
Selling, general and administrative		1,239.3		1,171.6		1,179.4
Depreciation and amortization		537.8		524.4		519.0
Goodwill impairment				414.0		_
Restructuring		66.8		75.3		_
Total operating expenses		3,517.1		3,702.7		3,083.5
Operating income		666.7		128.5		626.3
Non-operating income and (expense)						
Interest expense		(265.2)		(288.2)		(230.9)
Interest income		28.5		20.7		4.7
Earnings from equity method investments		18.3		16.3		13.0
Other income and (expense), net		(47.1)		(22.7)		(30.0)
Total non-operating income and (expense)		(265.5)		(273.9)		(243.3)
Income (loss) from continuing operations before income taxes		401.1		(145.3)		383.0
Provision for income taxes		(98.8)		(44.7)		(118.9)
Income (loss) from continuing operations		302.3		(190.1)		264.1
Discontinued operations, net of tax		_		(0.7)		17.4
Net income (loss)		302.3		(190.8)		281.5
Less: net income attributable to noncontrolling interests		(18.0)		(15.4)		(15.2)
Net income (loss) attributable to TransUnion	\$	284.4	\$	(206.2)	\$	266.3
Income (loss) from continuing operations	\$	302.3	\$	(190.1)	\$	264.1
Less: income from continuing operations attributable to noncontrolling interests		(18.0)		(15.4)		(15.2)
Income (loss) from continuing operations attributable to TransUnion		284.4		(205.4)		248.9
Discontinued operations, net of tax		_		(0.7)		17.4
Net income (loss) attributable to TransUnion	\$	284.4	\$	(206.2)	\$	266.3
Basic earnings (loss) per common share from:						
Income (loss) from continuing operations attributable to TransUnion	\$	1.46	\$	(1.06)	\$	1.29
Discontinued operations, net of tax		<u> </u>		_		0.09
Net income (loss) attributable to TransUnion	\$	1.46	\$	(1.07)	\$	1.38
Diluted earnings (loss) per common share from:					•	
Income (loss) from continuing operations attributable to TransUnion	\$	1.45	\$	(1.06)	\$	1.29
Discontinued operations, net of tax		<u> </u>		_		0.09
Net income (loss) attributable to TransUnion	\$	1.45	\$	(1.07)	\$	1.38
Weighted-average shares outstanding:						
Basic		194.4		193.4		192.5
Diluted	_	194.4		193.4		192.3
As a result of displaying amounts in millions, and for the calculation of earning	_		رمناه ه			

As a result of displaying amounts in millions, and for the calculation of earnings per share, rounding differences may exist in the table above. See accompanying notes to consolidated financial statements.

Consolidated Statements of Comprehensive Income (Loss)

(in millions)

	Years Ended December 31,							
		2024		2023	2022			
Net income (loss)	\$	302.3	\$	(190.8)	\$ 281.5			
Other comprehensive income (loss):								
Foreign currency translation:								
Foreign currency translation adjustment		(71.9)		81.1	(195.7)			
Benefit (provision) for income taxes		2.1		(2.0)	(0.7)			
Foreign currency translation, net		(69.8)		79.1	(196.4)			
Cash flow hedges:								
Net change on interest rate swap		(52.3)		(75.5)	260.1			
Benefit (provision) for income taxes		13.1		18.9	(64.9)			
Cash flow hedges, net		(39.2)		(56.6)	195.2			
Available-for-sale securities:								
Net unrealized gain (loss)		_		_	(0.3)			
Benefit for income taxes				<u> </u>	0.1			
Available-for-sale securities, net					(0.2)			
Total other comprehensive income (loss), net of tax		(109.0)		22.5	(1.4)			
Comprehensive income (loss)		193.3		(168.3)	280.1			
Less: comprehensive income attributable to noncontrolling interests		(15.3)		(14.3)	(12.9)			
Comprehensive income (loss) attributable to TransUnion	\$	178.0	\$	(182.6)	\$ 267.2			

See accompanying notes to consolidated financial statements.

TRANSUNION AND SUBSIDIARIES Consolidated Statements of Cash Flows

(in millions)

(III IIIIIIIIIIII)						
				d Decemb		
	2	2024	2	2023	2	022
Cash flows from operating activities:						
Net income (loss)	\$	302.3	\$	(190.8)	\$	281.5
Less: Discontinued operations, net of tax				(0.7)		17.4
Income (loss) from continuing operations		302.3		(190.1)		264.1
Adjustments to reconcile net income (loss) to net cash provided by operating activities:						
Depreciation and amortization		537.8		524.4		519.0
Goodwill impairment		_		414.0		_
Loss on repayment of loans		7.4		7.6		9.4
Deferred taxes		(157.3)		(162.7)		(88.9
Stock-based compensation		121.2		100.3		82.
Loss on early termination of lease		40.5		_		_
Other		34.3		26.0		22.0
Changes in assets and liabilities:						
Trade accounts receivable		(105.6)		(135.1)		(37.:
Other current and long-term assets		46.0		(12.7)		(17.
Trade accounts payable		39.2		(6.5)		(16.:
Other current and long-term liabilities		(33.3)		80.4		(436.
Cash provided by operating activities of continuing operations		832.5		645.6		301.0
Cash used in operating activities of discontinued operations				(0.2)		(3.
Cash provided by operating activities		832.5		645.4		297.
Cash flows from investing activities:						
Capital expenditures		(315.8)		(310.7)		(298.:
Proceeds from sale/maturity of other investments		0.2		82.3		143.:
Purchases of other investments		(0.2)		(53.5)		(146.
Investments in consolidated affiliates, net of cash acquired				<u> </u>		(508.
Investments in nonconsolidated affiliates		(5.9)		(36.9)		(16.
				(30.9)		(10.
Proceeds from the sale of investments in nonconsolidated affiliates		7.7		_		_
(Payments) proceeds related to disposal of discontinued operations		_		(0.5)		103.
Other		6.6		0.4		2.
Cash used in investing activities of continuing operations		(307.4)		(318.9)		(718.
Cash used in investing activities of discontinued operations						(5.
Cash used in investing activities		(307.4)		(318.9)		(723.
Cash flows from financing activities:						
Proceeds from Term Loans		1,793.1		655.8		_
Repayments of Term Loans	(1,786.1)		(347.7)		_
Repayments of debt		(198.9)		(650.0)		(714.
Debt financing fees		(16.5)		(3.3)		_
Proceeds from issuance of common stock and exercise of stock options		24.9		23.1		18.
Dividends to shareholders		(82.7)		(81.8)		(77.
Employee taxes paid on restricted stock units recorded as treasury stock		(31.7)		(18.4)		(32.:
Payment of contingent consideration				_		(2.
Distributions to noncontrolling interests		(10.8)		(16.5)		(11.:
Cash used in financing activities		(308.7)		(438.8)		(820.:
Effect of exchange rate changes on cash and cash equivalents		(13.1)		3.2		(9.
Net change in cash and cash equivalents		203.3		(109.1)		,257.
Cash and cash equivalents, beginning of period		476.2		585.3		,842.
Cash and cash equivalents, end of period	\$	679.5	\$	476.2	\$	585.
Supplemental disclosure of cash flow information:						
Cash paid during the period for:						
Interest	\$	261.0	\$	281.2	\$	221.
Income taxes, net of refunds	\$	202.5	\$		\$	573.0

TRANSUNION AND SUBSIDIARIES Consolidated Statements of Stockholders' Equity (in millions)

	Commo	on Stock						
	Shares	Amount	Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total
Balance, December 31, 2021	191.8	\$ 2.0	\$ 2,188.9	\$ (252.0)	\$ 2,257.8	\$ (285.4)	\$ 98.1	\$ 4,009.4
Net income		_	_	_	266.3	_	15.2	281.5
Other comprehensive income (loss)	_	_	_	_	_	0.9	(2.3)	(1.4)
Distributions to noncontrolling interests	_	_	_	_	_	_	(11.5)	(11.5)
Stock-based compensation	_	_	79.6	_	_	_	_	79.6
Employee share purchase plan	0.2	_	21.0	_	_	_	_	21.0
Exercise of stock options	0.1	_	0.8	_	_	_	_	0.8
Vesting of restricted stock units and performance stock units	0.9	_	_	_	_	_	_	_
Treasury stock purchased	(0.3)	_	_	(32.5)	_	_	_	(32.5)
Dividends to shareholders (\$0.40 per share)	_	_	_	_	(77.5)	_	_	(77.5)
Balance, December 31, 2022	192.7	\$ 2.0	\$ 2,290.3	\$ (284.5)	\$ 2,446.6	\$ (284.5)	\$ 99.5	\$ 4,269.4

TRANSUNION AND SUBSIDIARIES Consolidated Statements of Stockholders' Equity—Continued (in millions)

	Commo	n Stock						
	Shares	Amount	Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total
Balance, December 31, 2022	192.7	\$ 2.0	\$ 2,290.3	\$ (284.5)	\$ 2,446.6	\$ (284.5)	\$ 99.5	\$ 4,269.4
Net (loss) income	_	_	_	_	(206.2)	_	15.4	(190.8)
Other comprehensive income (loss)	_	_	_	_	_	23.6	(1.1)	22.5
Distributions to noncontrolling interests	_	_	_	_	_	_	(16.5)	(16.5)
Stock-based compensation	_	_	95.6	_	_	_	_	95.6
Employee share purchase plan	0.4	_	26.4	_	_	_	_	26.4
Exercise of stock options	0.1	_	0.6	_	_	_	_	0.6
Vesting of restricted stock units and performance stock units	0.8	_	_	_	_	_	_	_
Treasury stock purchased	(0.2)	_	_	(18.4)	_	_	_	(18.4)
Dividends to shareholders (\$0.42 per share)	_		_	_	(83.3)	_	_	(83.3)
Balance, December 31, 2023	193.8	\$ 2.0	\$ 2,412.9	\$ (302.9)	\$ 2,157.1	\$ (260.9)	\$ 97.3	\$ 4,105.5

TRANSUNION AND SUBSIDIARIES Consolidated Statements of Stockholders' Equity—Continued (in millions)

	Commoi	n Stock						
	Shares	Amount	Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total
Balance, December 31, 2023	193.8	\$ 2.0	\$ 2,412.9	\$ (302.9)	\$ 2,157.1	\$ (260.9)	\$ 97.3	\$ 4,105.5
Net income		_	_		284.4	_	18.0	302.3
Other comprehensive loss	_	_	_	_	_	(106.3)	(2.7)	(109.0)
Distributions to noncontrolling interests		_	_		_	_	(10.8)	(10.8)
Stock-based compensation	_	_	116.6	_	_	_	_	116.6
Employee share purchase plan	0.4	_	29.1	_	_		_	29.1
Exercise of stock options	_	_	0.3	_	_	_	_	0.3
Vesting of restricted stock units and performance stock units	1.0	_	_	_	_	_	_	_
Treasury stock purchased	(0.3)	_	_	(31.7)	_	_	_	(31.7)
Dividends to shareholders (\$0.42 per share)					(83.6)	_	_	(83.6)
Balance, December 31, 2024	194.9	\$ 2.0	\$ 2,558.9	\$ (334.6)	\$ 2,357.9	\$ (367.2)	\$ 101.8	\$ 4,318.8

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements Years Ended December 31, 2024, 2023 and 2022

(Tabular amounts in millions, except per share amounts)

1. Significant Accounting Policies

Description of Business

TransUnion is a leading global information and insights company that makes trust possible between businesses and consumers, helping people around the world access opportunities that can lead to a higher quality of life. We have built robust data and analytics assets for a large portion of the adult population in the markets we serve. We use our platform to connect these disparate data assets and concentrate them on a single, layered and unified environment, enabling more persistent identity resolution with sharper, more contextualized insights. We use these insights, combined with our industry expertise, to develop impactful solutions to solve customers' needs, including credit risk, marketing, and fraud mitigation.

Our solutions enable businesses to manage and measure credit risk, market to new and existing customers, verify consumer identities, and mitigate fraud. Businesses embed our solutions into their workflows to deliver critical insights and enable effective actions. Consumers use our solutions to view their credit profiles, access analytical tools that help them understand and manage their personal financial information and take precautions against identity theft. We have a global presence across North America, Latin America, Europe, Africa, and Asia Pacific.

Basis of Presentation

The accompanying consolidated financial statements of TransUnion and subsidiaries have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). Our consolidated financial statements reflect all adjustments which, in the opinion of management, are necessary for a fair presentation of the periods presented. Certain prior year amounts have been reclassified to conform to the current year presentation. These reclassifications had no impact on the Company's consolidated balance sheets, statements of operations or statements of stockholders' equity. As a result of displaying amounts in millions, rounding differences may exist in the financial statements and footnote tables.

During the first quarter of 2024, we reorganized our operations to merge our Consumer Interactive operating segment with our U.S. Markets operating segment. This change aligns with our transformation plan for an integrated U.S. business with common enabling functions to achieve greater cost efficiencies. In addition, we changed the responsibility for certain international operations previously managed within the U.S. Markets segment to certain regions within the International segment.

As a result, we have two operating segments, U.S. Markets and International, which are consistent with our reportable segments, and reflect the structure of the Company's internal organization, the method by which the Company's resources are allocated and the manner in which the chief operating decision maker assesses the Company's performance.

The reporting of certain revenue from the acquisition of Argus Information and Advisory Services, Inc. and Commerce Signals, Inc. (collectively, "Argus"), which was previously reported within our Financial Services vertical, is now reported in Emerging Verticals in the U.S. Markets operating segment. While this change does not impact our operating segments, it does impact our disaggregated revenue disclosures.

We have recast our historical financial information presented in this Annual Report on Form 10-K to reflect these changes and conform to our current operating structure.

Unless the context indicates otherwise, any reference in this report to the "Company," "we," "our," "us," and "its" refers to TransUnion and its consolidated subsidiaries, collectively.

For the periods presented, TransUnion does not have any material assets, liabilities, revenues, expenses or operations of any kind other than its ownership investment in TransUnion Intermediate Holdings, Inc.

Principles of Consolidation

The consolidated financial statements of TransUnion include the accounts of TransUnion and all of its controlled subsidiaries. All intercompany transactions and balances have been eliminated.

Investments in Affiliated Companies

Investments in affiliated companies represent our investments in non-consolidated domestic and foreign entities. These entities operate in businesses similar to ours.

Investments in nonmarketable unconsolidated entities in which the Company is able to exercise significant influence are accounted for using the equity method. For equity method investments, we adjust the carrying value for our proportionate share of the affiliates' earnings, losses and distributions, as well as for purchases and sales of our ownership interest.

Investments in nonmarketable unconsolidated entities in which the Company is not able to exercise significant influence, our "Cost Method Investments," are accounted for at our initial cost, minus any impairment, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. We adjust the carrying value for any purchases or sales of our ownership interests. We record any dividends received from these investments as other income in non-operating income and expense in the Consolidated Statements of Operations.

See Note 9, "Investments in Affiliated Companies," for a further discussion.

Variable Interest Entities

At inception, we determine whether an entity in which we have made an investment in or have other variable interest arrangements with is considered a variable interest entity ("VIE"). We are required to consolidate any VIE if we are the primary beneficiary of a VIE if we have the power to direct activities that most significantly affect the economic performance of the VIE and have the obligation to absorb a portion of the losses or benefits that are significant to the VIE. If we are not the primary beneficiary of the VIE, we account for the investment or other variable interests in the VIE in accordance with other applicable GAAP. When events or circumstances change our variable interests or relationships with any of these entities, we reassess our determination of whether they are a VIE and, if so, whether we are the primary beneficiary. As of December 31, 2024, we have a variable interest in one unconsolidated variable interest entity with a current exposure of loss of approximately \$35.3 million, consisting of the current carrying value of our investment in and receivables from this entity.

Use of Estimates

The preparation of consolidated financial statements and related disclosures in accordance with GAAP requires management to make estimates and judgments that affect the amounts reported. We believe that the estimates used in preparation of the accompanying consolidated financial statements are reasonable, based upon information available to management at this time. These estimates and judgments affect the reported amounts of assets, liabilities and disclosure of contingent assets and liabilities at the balance sheet date, as well as the amounts of revenue and expense during the reporting period. Estimates are inherently uncertain and actual results could differ materially from the estimated amounts.

Segments

Operating segments are businesses for which separate financial information is available and evaluated regularly by our chief operating decision maker ("CODM") deciding how to allocate resources and assess performance. As discussed above, during the first quarter of 2024, we reorganized our operations to merge our Consumer Interactive operating segment with our U.S. Markets operating segment. As a result, we have two operating and reportable segments; U.S. Markets and International. We also report expenses for Corporate, which provides support services to each segment. Details of our segment results are discussed in Note 19, "Reportable Segments."

Foreign Currency Translation

The functional currency for each of our foreign subsidiaries is generally that subsidiary's local currency. We translate the assets and liabilities of foreign subsidiaries at the period-end exchange rate, and translate revenues and expenses at the monthly average rates during the year. We record the resulting translation adjustment as a component of other comprehensive income in stockholders' equity.

Transaction gains and losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency of an entity are included in the results of operations as incurred. The exchange rate gains and losses for the years ended December 31, 2024, 2023 and 2022 were not material.

Revenue Recognition

All of our revenue is derived from contracts with our customers and is reported as revenue in the Consolidated Statements of Operations generally as or at the point in time our performance obligations are satisfied. A performance obligation is a promise in a contract to transfer a distinct good or service to a customer. We have contracts with two general groups of performance obligations; those that require us to stand ready to provide goods and services to a customer to use as and when requested ("Stand Ready Performance Obligations") and those that do not require us to stand ready ("Other Performance Obligations"). Our Stand Ready Performance Obligations include obligations to stand ready to provide data, process transactions, access our databases, software-as-a-service and direct-to-consumer products, rights to use our intellectual property and other services. Our Other Performance Obligations include the sale of certain batch data sets and various professional and other services.

Most of our Stand Ready Performance Obligations consist of a series of distinct goods and services that are substantially the same and have the same monthly pattern of transfer to our customers. We consider each month of service in this time series to be a distinct performance obligation and, accordingly, recognize revenue over time. For a majority of these Stand Ready Performance Obligations, the total contractual price is variable because our obligation is to process an unknown quantity of transactions, as and when requested by our customers, over the contract period. We allocate the variable price to each month of service using the time-series concept and recognize revenue based on the most likely amount of consideration to which we will be entitled, which is generally the amount we have the right to invoice. This monthly amount can be based on the actual volume of units delivered or a guaranteed minimum, if higher. Occasionally we have contracts where the amount we will be entitled to for the transactions processed is uncertain, in which case we estimate the revenue based on what we consider to be the most likely amount of consideration we will be entitled to and adjust any estimates as facts and circumstances evolve.

For all contracts that include a Stand Ready Performance Obligation with variable pricing, we are unable to estimate the variable price attributable to future performance obligations because the number of units to be purchased is not known. As a result, we use the exception available to forgo disclosures about revenue attributable to the future performance obligations where we recognize revenue using the time-series concept as discussed above, including those qualifying for the right to invoice practical expedient. We also use the exception available to forgo disclosures about revenue attributable to contracts with expected durations of one year or less.

Certain of our Other Performance Obligations, including certain batch data sets and certain professional and other services, are delivered at a point in time. Accordingly, we recognize revenue upon delivery once we have satisfied that obligation. For certain Other Performance Obligations, including certain professional and other services, we recognize revenue over time, based on an estimate of progress towards completion of that obligation. Other Performance Obligations are not material.

In certain circumstances, we apply the revenue recognition guidance to a portfolio of contracts with similar characteristics. We use estimates and assumptions when accounting for a portfolio that reflect the size and composition of the portfolio of contracts.

Our contracts include standard commercial payment terms generally acceptable in each region, and do not include financing with extended payment terms. We have no significant obligations for refunds, warranties, or similar obligations. Our revenue does not include taxes collected from our customers.

Deferred revenue generally consists of amounts billed in excess of revenue recognized for the sale of data services, subscriptions and set up fees. The current and long-term portions of deferred revenue are included in other current liabilities and other liabilities.

See Note 15, "Revenue," for further details.

Costs of Services

Costs of services includes data acquisition and royalty fees, personnel costs related to our databases and software applications, consumer and call center support costs, hardware and software maintenance costs, telecommunication expenses and data center costs.

Selling, General and Administrative Expenses

Selling, general and administrative expenses includes personnel-related costs for sales, administrative and management employees, costs for professional and consulting services, advertising and facilities expenses. Advertising costs are expensed as incurred. Advertising costs, which include fees we pay to our partners to promote our products online, for the years ended December 31, 2024, 2023 and 2022 were \$61.4 million, \$64.2 million and \$87.7 million, respectively.

Stock-Based Compensation

Compensation expense for all stock-based compensation awards is determined using the grant date fair value. For all equity-based plans, we record the impact of forfeitures when they occur. Expense is recognized on a straight-line basis over the requisite service period of the award, which is generally equal to the vesting period.

We generally issue service-based restricted stock units that vest based on the passage of time and performance-based restricted stock units that vest based on the achievement of 3-year cumulative revenue and Adjusted Diluted Earnings per Share ("Adjusted EPS") targets, and market-based relative total stockholder return ("TSR") based on how our stock price performs relative to a benchmark of similar companies over a three-year period. Vesting of both restricted stock units and performance-based restricted stock units is contingent on continued employment. Prior to the year ended December 31, 2024, we issued performance-based restricted stock units that vest based on the achievement of Adjusted EBITDA targets instead of Adjusted EPS targets. Service-based awards generally vest over 3-years and the number of shares which could potentially be issued ranges from zero to 250% of the target award. We occasionally issue off-cycle or special grants that could have different performance measurements and vesting terms.

The closing market price of our stock on the date of grant is used to determine the grant date fair value for our restricted stock units except those that are subject to market performance. A risk-neutral Monte-Carlo simulation model based on input assumptions that exist as of the date of each grant is used to determine the fair value of awards based on TSR. The primary input assumptions utilized in determining the grant date fair value of the restricted stock units based on TSR are the expected stock volatility for the Company and the benchmark group of companies, the risk-free interest rate, expected dividend yields, and correlations between our stock price and the stock prices of the peer group of companies.

The details of our stock-based compensation program are discussed in Note 17, "Stock-Based Compensation."

Benefit Plans

We maintain a defined-contribution savings plan for eligible employees. We provide a partial matching contribution based on a participant's eligible contributions and may provide an annual discretionary contribution. Contributions to this plan for the years ended December 31, 2024, 2023 and 2022 were \$36.9 million, \$34.7 million and \$32.9 million, respectively.

Restructuring

Restructuring expenses consist of employee-separation costs, including severance and other benefits calculated based on long-standing benefit practices and local statutory requirements. In some jurisdictions, the Company has ongoing benefit arrangements under which the Company records estimated severance and other termination benefits when such costs are deemed probable and estimable, approved by the appropriate corporate management, and if actions required to complete the termination plan indicate it is unlikely that significant changes to the plan will be made or the plan will be withdrawn. Severance and other termination benefits for which there is not an ongoing benefit arrangement are recorded when appropriate corporate management has committed to the plan and the benefit arrangement is communicated to the affected employees. In addition, restructuring expenses include a loss on early termination of leased facility assets which are abandoned in connection with such terminations.

Income Taxes

Deferred income tax assets and liabilities are determined based on the estimated future tax effects of temporary differences between the financial statement and tax basis of assets and liabilities, as measured by current enacted tax rates. The effect of a tax rate change on deferred tax assets and liabilities is recognized in operations in the period that includes the enactment date of the change. We periodically assess the recoverability of our deferred tax assets, and a valuation allowance is recorded against deferred tax assets if it is more likely than not that some portion of the deferred tax assets will not be realized. See Note 16, "Income Taxes," for additional information.

Cash and Cash Equivalents

We consider investments in highly liquid debt instruments with original maturities of three months or less to be cash equivalents. The carrying value of our cash and cash equivalents approximate their fair value.

Concentration of Risk

Financial instruments that potentially subject us to a concentration of risk consist primarily of cash and cash equivalents. Our cash balances are primarily on deposit at high credit quality institutions or invested in money market funds. These deposits are typically in excess of insured limits. We have established guidelines relative to diversification and maturities for maintaining safety and liquidity.

Trade Accounts Receivable

We base our allowance for doubtful accounts estimate on our historical loss experience, our current expectations of future losses, current economic conditions, an analysis of the aging of outstanding receivables and customer payment patterns, and specific reserves for customers in adverse financial condition or for existing contractual disputes.

The following is a roll-forward of the allowance for doubtful accounts for the periods presented:

	Years Ended December 31,					
		2024		2023		2022
Beginning Balance	\$	16.4	\$	11.0	\$	10.7
Provision for losses on trade accounts receivable		18.7		8.8		5.9
Write-offs, net of recovered accounts		(15.2)		(3.4)		(5.6)
Ending balance	\$	19.9	\$	16.4	\$	11.0

Marketable Securities

We classify our investments in debt and equity securities in accordance with our intent and ability to hold the investments. Held-to-maturity securities are carried at amortized cost, which approximates fair value, and are classified as either short-term or long-term investments based on the contractual maturity date. Earnings from these securities are reported as a component of interest income. Available-for-sale securities, if any, are carried at fair market value, with the unrealized gains and losses, net of tax, included in accumulated other comprehensive income.

At December 31, 2024 and 2023, the Company's marketable securities consisted of available-for-sale securities. The available-for-sale securities relate to foreign exchange-traded corporate bonds. There were no significant realized or unrealized gains or losses for these securities for any of the periods presented. We follow fair value guidance to measure the fair value of our financial assets as further described in Note 18, "Fair Value".

We periodically review our marketable securities to determine if there is an other-than-temporary impairment on any security. If it is determined that an other-than-temporary decline in value exists, we write down the investment to its market value and record the related impairment loss in other income. There were no other-than-temporary impairments of marketable securities in 2024, 2023 or 2022.

Contract Acquisition Costs

We recognize an asset for the incremental costs of obtaining a contract with a customer if we expect the benefit of those costs to be longer than one year. We have determined that certain sales incentive programs meet the requirements to be capitalized. We use a portfolio approach to amortize capitalized contract acquisition costs on a straight-line basis over five years, which reflects the estimated average period of benefit and is consistent with the transfer of our services to our customer to which the contract relates. We classify capitalized contract acquisition costs as current or noncurrent based on the timing of expense recognition. The current and noncurrent portions are included in other current assets and other assets, respectively, in our Consolidated Balance Sheets. Amortization expense is included in selling, general and administrative within our accompanying Consolidated Statements of Operations.

As of December 31, 2024 and 2023, we had capitalized contract acquisition costs of \$60.4 million and \$39.9 million, respectively, which have been included in other current assets and other assets in our accompanying Consolidated Balance Sheets. For the years ended December 31, 2024, 2023 and 2022, we amortized \$12.8 million, \$7.2 million and \$4.4 million of capitalized contract acquisition costs to selling, general and administrative expenses on our Consolidated Statements of Operations.

Business Combinations

We account for business combinations under the acquisition method of accounting. The acquisition method requires, among other things, that assets acquired and liabilities assumed in a business combination generally be recognized at their fair values as of the acquisition date. The determination of fair value requires management to make significant estimates and assumptions. The excess of the purchase price over the fair value of the acquired net assets has been recorded as goodwill. The results of

operations of these acquisitions are included in our consolidated financial statements from the respective dates of acquisition. See Note 2, "Business Acquisitions," for further details.

Long-Lived Assets

Property, Plant, Equipment

Property, plant and equipment is depreciated primarily using the straight-line method, over the estimated useful lives of the assets. Buildings and building improvements are generally depreciated over 20 years. Computer equipment and furniture and purchased software are depreciated over 3 to 7 years. Leasehold improvements are depreciated over the shorter of the estimated useful life of the asset or the lease term. Assets to be disposed of, if any, are separately presented in the Consolidated Balance Sheet and reported at the lower of the carrying amount or fair value, less costs to sell, and are no longer depreciated. We write off the gross cost and accumulated depreciation of assets that are disposed of or no longer in use. See Note 5, "Property, Plant and Equipment" for additional information about these assets.

Definite-Lived Intangible Assets

Intangible assets are initially recorded at their acquisition cost, at relative fair value if acquired as part of an asset acquisition, or fair value if acquired as part of a business combination, and amortized over their estimated useful lives. All intangible assets are amortized on a straight-line basis, which approximates the pattern of benefit. Database and credit files are generally amortized over a 12 to 15 year period. Internal use software is generally amortized over 3 to 10 year period. Customer relationships are amortized over a 10 to 20 year period. Trademarks primarily consist of the TransUnion trade name, which is being amortized over a 40 year useful life, and the remaining trademark assets are generally amortized over a shorter period based on their estimated useful life, which ranges between 1 and 20 years. Copyrights, patents, noncompete and other agreements are amortized over varying periods based on their estimated useful lives. Intangible assets are subsequently removed from the presentation of gross cost and accumulated amortization once they are no longer in use or become fully amortized. See Note 7, "Intangible Assets" for additional information.

For internal use software, we monitor the activities of each of our system development projects and analyze the associated costs, making an appropriate distinction between costs to be expensed and costs to be capitalized. Costs incurred during the preliminary project stage are expensed as incurred. Many of the costs incurred during the application development stage are capitalized, including costs of software design and configuration, development of interfaces, coding, testing and installation of the software. We begin to amortize the software once it is ready for its intended use.

Impairment of Long-Lived Assets

We review long-lived asset groups that are subject to amortization for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. Recoverability of asset groups to be held and used is measured by a comparison of the carrying amount of an asset group to the estimated undiscounted future cash flows expected to be generated by the asset group. If the carrying amount of an asset group exceeds its estimated future cash flows, an impairment charge is recognized equal to the amount by which the carrying amount of the asset group exceeds the fair value of the asset group. There were no significant impairment charges recorded during 2024, 2023 and 2022.

Goodwill

Other than goodwill, we have no other indefinite-lived intangible assets. Goodwill is allocated to our reporting units, which are an operating segment or one level below an operating segment. We conduct an impairment test annually in the fourth quarter of each year, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired.

We have the option to first perform a qualitative analysis to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying value. If the qualitative analysis indicates that an impairment is more likely than not for any reporting unit, we perform a quantitative impairment test for that reporting unit. We have the option to bypass the qualitative analysis for any reporting unit and proceed directly to performing a quantitative impairment test.

When we perform a quantitative impairment test, we use a combination of an income approach, using the discounted cash flow method, and a market approach, using the guideline public company method, to determine the fair value of each reporting unit. For each reporting unit, we compare the fair value to its carrying value including goodwill. If the fair value of the reporting unit is less than its carrying value, we record an impairment charge based on that difference, up to the amount of goodwill recorded in that reporting unit.

The quantitative impairment test requires the application of a number of significant assumptions, including estimates of future revenue growth rates, EBITDA margins, discount rates, and market multiples. The projected future revenue growth rates and EBITDA margins, and the resulting projected cash flows of each reporting unit are based on historical experience and internal operating plans reviewed by management, extrapolated over the forecast period. Discount rates are determined using a weighted average cost of capital adjusted for risk factors specific to each reporting unit. Market multiples are based on the guideline

public company method using comparable publicly traded company multiples of EBITDA for a group of benchmark companies.

Leases

We determine if an arrangement is a lease at the inception of a contract. Our operating leases principally involve office space with fixed monthly lease payments that may also contain variable non-lease components consisting of common area maintenance, operating expenses, insurance and similar costs of the space that we occupy. We have adopted the practical expedient to not separate these non-lease components from the lease components and instead account for them as a single lease component for all of our leases. This practical expedient allows us to allocate the fixed lease components and the non-lease components based on the contractually stated amounts, with the fixed lease components included in our Right-of-Use ("ROU") lease assets and lease liability values. Variable payments are not included within the ROU lease assets or lease liabilities and are expensed in the period in which they are incurred.

We have options to extend many of our operating leases for an additional period of time and options to terminate several of our operating leases early. The lease term consists of the non-cancelable period of the lease, periods covered by options to extend the lease if we are reasonably certain to exercise the option, periods covered by an option to terminate the lease if we are reasonably certain not to exercise the option, and periods covered by an option to extend or not to terminate the lease in which the exercise of the option is controlled by the lessor.

On the commencement date of an operating lease, we record a ROU lease asset, which represents our right to use or control the use of the specified asset for the lease term, and an offsetting lease liability, which represents our obligation to make lease payments arising from the lease, based on the present value of the net fixed future lease payments due over the initial lease term. We have elected to use the portfolio approach to assess the discount rate we use to calculate the present value of our future lease payments. We use an estimate of the incremental borrowing rate for similarly rated debt issuers, at the inception of the lease or when the lease is assumed, as the discount rate to determine the present value of the net fixed future lease payments, except for leases where the interest rate implicit in the lease is readily determinable.

Lease accounting guidance requires us to expense the net fixed payments of operating leases on a straight-line basis over the lease term. We include any built up deferred or prepaid rent balance resulting from the difference between the straight-line expense and the cash payments as a component of our ROU lease asset. Also included in our ROU lease asset is any monthly prepayment of rent. Our rent expense is typically due on the first day of each month, and we typically pay rent several weeks before it is due, so at any given month end, we will have a prepaid rent balance that is included as a component of our ROU lease asset.

We have adopted an accounting policy to recognize rent expense for short-term leases, those leases with initial lease terms of twelve months or less, on a straight-line basis in our income statement. We have no significant short-term operating leases, finance leases, or subleases.

ROU lease assets are included in other assets, and operating lease liabilities are included in other current liabilities and other liabilities in our Consolidated Balance Sheet. Finance lease assets are included in property, plant and equipment, and finance lease liabilities, if any, are included in the current portion of long-term debt and long-term debt in our Consolidated Balance Sheet. For leases where we will derive no economic benefit from leased space that we have vacated, we recognize an impairment of right-of-use assets at the time we vacate. See Note 8, "Other Assets," Note 10, "Other Current Liabilities," Note 12, "Other Liabilities," and Note 13, "Debt," for additional information about these items.

Recently Adopted Accounting Pronouncements

On November 27, 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-07, Segment Reporting (Topic 280), Improvements to Reportable Segment Disclosures. This ASU updates the requirements for segment reporting to include, among other things, disaggregating and quantifying significant segment expenses that are regularly provided to the chief operating decision maker ("CODM") and included in the measure of segment profit, describing the nature of amounts not separately disaggregated, allowing for additional measures of a segment's profit or loss used by the CODM when deciding how to allocate resources, and extending nearly all annual segment reporting requirements to quarterly reporting requirements. We have adopted this standard for the year ended December 31, 2024. See Note 19, "Reportable Segments" for additional information about our segment reporting.

Recent Accounting Pronouncements Not Yet Adopted

On December 14, 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740)*, *Improvements to Income Tax Disclosures*. This ASU requires income tax disclosures to include consistent categories and greater disaggregation of information in the rate reconciliations and the disaggregation of income taxes paid by federal, state and foreign, and also for individual jurisdictions that are greater than 5% of total income taxes paid. The update is effective for annual periods for fiscal years beginning after December 15, 2024 on a prospective basis. Early adoption is permitted. We are currently assessing the impact adopting this ASU will have on our consolidated financial statements.

On November 4, 2024, the FASB issued ASU 2024-03, *Income Statement - Reporting Comprehensive Income - Expense Disaggregation Disclosures (Subtopic 220-04), Disaggregation of Income Statement Expenses.* This ASU requires disclosure within the notes to financial statements of specific information about certain costs and expenses including more detailed disclosures of certain categories of expenses such as employee compensation, depreciation and intangible asset amortization that are components of existing expense captions presented on the face of the income statement. The update is effective for annual periods for fiscal years beginning after December 15, 2026 and interim periods beginning after December 15, 2027 on a prospective or retrospective basis. Early adoption is permitted. We are currently assessing the impact adopting this ASU will have on our consolidated financial statements.

2. Business Acquisitions

Verisk Financial Services

On April 8, 2022, we completed our acquisition of Verisk Financial Services ("VF"), the financial services business unit of Verisk Analytics, Inc. ("Verisk"). We acquired 100% of the outstanding equity interest of the entities that comprise VF for \$505.7 million in cash, including a decrease of \$2.3 million recorded subsequent to the acquisition date for certain customary purchase price adjustments. We retained the leading core businesses of Argus, and identified several non-core businesses that we classified as held-for-sale as of the acquisition date that we subsequently divested. See Note 3, "Discontinued Operations," for a further discussion.

We engaged in business activities with VF prior to the acquisition that were not material. The results of operations of Argus subsequent to the acquisition date are included in the U.S. Markets segment, including revenue of \$71.5 million and net income of \$2.8 million in 2022.

The purchase price allocated to total assets acquired was \$576.7 million, which consisted of goodwill of \$167.2 million, intangible assets of \$195.0 million, current and non-current assets of discontinued operations of \$143.4 million and \$71.1 million of other current and long-term assets of continuing operations. The purchase price allocated to total liabilities was \$71.0 million, which consisted of deferred tax liabilities of \$39.8 million, other current and long-term liabilities of continuing operations of \$22.8 million, and current and long-term liabilities of discontinued operations of \$8.4 million.

3. Discontinued Operations

As discussed in Note 2, "Business Acquisition," on April 8, 2022, we completed the acquisition of VF, which included Argus and several non-core businesses that we classified as held-for-sale as of the acquisition date. We classified the results of operations of the non-core businesses as discontinued operations, net of tax, in the Consolidated Statements of Operations for the year ended December 31, 2022, including a \$7.5 million gain on the sale of these businesses. We sold these non-core businesses on December 30, 2022, and therefore have no assets or liabilities of these businesses on our Consolidated Balance Sheets for the periods presented. In 2022, we received total proceeds of \$173.9 million, consisting of \$103.6 million in cash, and a note receivable with a face value of \$72.0 million and a fair value on the date of sale of \$70.3 million. We finalized the purchase price in the third quarter of 2023 and recorded a \$0.5 million reduction of the gain on sale included in discontinued operations, net of tax. Expenses related to these non-core businesses for the year ended December 31, 2023 were not significant.

The activity reflected in the table below for the year ended December 31, 2022, is related to the non-core businesses from the VF acquisition as well as an incremental gain on sale of discontinued operations, net of tax, related to our healthcare business, which we divested in December 2021. Discontinued operations, net of tax, as reported on our Consolidated Statements of Operations for the year ended December 31, 2022 consisted of the following:

	ed December , 2022
Revenue	\$ 36.7
Operating expenses	
Cost of services (exclusive of depreciation and amortization below)	11.7
Selling, general and administrative	14.9
Depreciation and amortization	 _
Total operating expenses	26.6
Operating income of discontinued operations	10.1
Non-operating income and (expense)	 (0.5)
Income before income taxes from discontinued operations	9.6
Provision for income taxes	(0.1)
Gain on sale of discontinued operations, net of tax	 8.0
Discontinued operations, net of tax	\$ 17.4

4. Other Current Assets

Other current assets consisted of the following:

	Dec	cember 31, 2024	De	cember 31, 2023
Prepaid expenses	\$	126.0	\$	145.4
Note receivable (Notes 3, 8 and 18)		89.7		_
Marketable securities (Note 18)		2.5		2.7
Other		105.1		127.8
Total other current assets	\$	323.4	\$	275.9

The note receivable was reclassified from non-current to current because repayment is required no later than December 31, 2025.

5. Property, Plant and Equipment

Property, plant and equipment, including those acquired by finance lease, consisted of the following:

	ember 31, 2024	Dec	cember 31, 2023
Computer equipment and furniture	\$ 468.9	\$	615.8
Purchased software	107.4		240.9
Building and building improvements	130.4		143.8
Land	3.2		3.2
Total cost of property, plant and equipment	709.8		1,003.7
Less: accumulated depreciation	(506.3)		(804.4)
Total property, plant and equipment, net of accumulated depreciation	\$ 203.5	\$	199.3

Depreciation expense for the years ended December 31, 2024, 2023 and 2022, was \$89.0 million, \$96.6 million and \$105.9 million, respectively.

During 2024, fully depreciated assets that were disposed of or are no longer in use were written off from the cost and accumulated depreciation amounts in the table above.

6. Goodwill

Our reporting units consist of U.S. Markets and Consumer Interactive within our U.S. Markets segment, and the geographic regions of the United Kingdom, Africa, Canada, Latin America, India and Asia Pacific within our International reportable segment.

For our 2024 annual goodwill impairment test, we performed a qualitative test on certain reporting units and elected to bypass the qualitative test and performed a quantitative test for other reporting units. We considered a variety of factors in our decision to perform a qualitative assessment for certain reporting units, including but not limited to, macro-economic conditions, share price performance, financial performance of each reporting unit, and the results of the most recent quantitative assessment. The results of our qualitative tests did not identify any factors that suggest it was more likely than not the fair value of any of these reporting units was less than its carrying value. For all of the reporting units subject to a quantitative test, including the United Kingdom reporting unit, the fair value exceeded the carrying value by more than 10%.

Aside from the segment reorganization in the first quarter of 2024 discussed in Note 1, "Significant Accounting Policies" there have been no triggering events during 2024 that have required us to re-evaluate whether any of our reporting units were impaired.

During the three months ended September 30, 2023, the worsening macroeconomic conditions from inflationary pressures and rising interest rates increasingly impacted our United Kingdom business for the third quarter and the near-term outlook, creating a triggering event that required an interim impairment assessment which resulted in a goodwill impairment of \$414.0 million for our United Kingdom reporting unit. Other than the United Kingdom impairment charge recorded in the third quarter of 2023 there were no impairment charges recorded in 2024, 2023 or 2022.

Goodwill allocated to our reportable segments as of December 31, 2024 and 2023, and the changes in the carrying amount of goodwill during the periods, which includes a reallocation of goodwill using the relative fair value allocation approach, consisted of the following:

	U.S	S. Markets	In	nternational	Consumer Interactive		Total
Balance, December 31, 2022	\$	3,602.7	\$	1,269.6	\$ 679	0.1 \$	5,551.4
Purchase accounting measurement period adjustments		(0.5)		_	-		(0.5)
Foreign exchange rate adjustment		0.5		38.5		_	39.0
Impairment		_		(414.0)			(414.0)
Balance, December 31, 2023	\$	3,602.8	\$	894.1	\$ 679	0.1 \$	5,176.0
Reallocation of goodwill from segment reorganization		655.6		23.5	(679	0.1)	_
Foreign exchange rate adjustment		(0.8)		(30.9)			(31.7)
Balance, December 31, 2024	\$	4,257.6	\$	886.7	\$	\$	5,144.3

The gross and net goodwill balances, taking into consideration the reorganization discussed above, at each period were as follows:

	Γ	Decer	mber 31, 202	4		 December 31, 2023						
	Gross Goodwill		cumulated npairment	Net	t Goodwill	Gross Goodwill		ccumulated mpairment	Ne	et Goodwill		
U.S Markets	\$ 4,257.6	\$	_	\$	4,257.6	\$ 4,281.9	\$	_	\$	4,281.9		
International	1,300.7		(414.0)		886.7	1,308.1		(414.0)		894.1		
Total	\$ 5,558.3	\$	(414.0)	\$	5,144.3	\$ 5,590.0	\$	(414.0)	\$	5,176.0		

7. Intangible Assets

Intangible assets consisted of the following:

		D	ecen	nber 31, 202	4		December 31, 2023						
	Accumulated Gross Amortization Net			Accumulated Gross Amortization					Net				
Customer relationships	\$	2,055.0	\$	(561.7)	\$	1,493.3	\$	2,060.2	\$	(451.6)	\$	1,608.6	
Internal use software		1,589.1		(653.0)		936.2		2,204.5		(1,239.7)		964.8	
Database and credit files		1,339.8		(896.6)		443.2		1,372.2		(829.2)		543.0	
Trademarks, copyrights and patents		566.7		(183.0)		383.7		587.7		(188.8)		398.9	
Noncompete and other agreements		1.3		(0.2)		1.1		10.5		(10.5)		_	
Total intangible assets	\$	5,551.9	\$	(2,294.5)	\$	3,257.5	\$	6,235.1	\$	(2,719.8)	\$	3,515.3	

Changes in the carrying amount of intangible assets between periods consisted of the following:

	Gross	Net	
Balance, December 31, 2023	\$ 6,235.1	\$ (2,719.8)	\$ 3,515.3
Developed internal use software	202.1		202.1
Acquired intangible assets	5.7	_	5.7
Amortization	_	(448.8)	(448.8)
Disposals and retirements	(855.2)	855.2	
Foreign exchange rate adjustment	 (35.9)	 19.0	(16.9)
Balance, December 31, 2024	\$ 5,551.9	\$ (2,294.5)	\$ 3,257.5

During 2024, fully amortized intangible assets were written off from the gross and accumulated amortization presented in the table above. The weighted average lives of our intangibles is approximately 15 years as of December 31, 2024.

Amortization expense related to intangible assets for the years ended December 31, 2024, 2023 and 2022, was \$448.8 million, \$427.8 million and \$413.1 million, respectively. Estimated future amortization expense related to intangible assets at December 31, 2024 is as follows:

	Amo	annual ortization expense
2025	\$	458.2
2026		431.5
2027		366.3
2028		302.9
2029		251.6
Thereafter		1,447.0
Total future amortization expense	\$	3,257.5

8. Other Assets

Other assets consisted of the following:

		December 31, 2024		,		cember 31, 2023
Investments in affiliated companies (Note 9)	\$	279.9	\$	291.4		
Right-of-use lease assets (Note 14)		55.8		98.9		
Interest rate swaps (Notes 13 and 18)		110.0		162.3		
Note receivable (Notes 3, 4 and 18)				82.0		
Deferred income tax asset (Note 16)		10.1		11.1		
Other		121.9		93.7		
Total other assets	\$	577.7	\$	739.4		

Right-of-use lease assets decreased as a result of a lease termination during the year ended December 31, 2024, see further discussion in Note 11, "Restructuring." The note receivable was reclassified from non-current to current because repayment is required no later than December 31, 2025.

9. Investments in Affiliated Companies

Investments in affiliated companies, which are included in other assets in the Consolidated Balance Sheets, consisted of the following:

		December 31, 2024		,		December 31, 2023	
Cost Method Investments	\$	228.4	\$	233.8			
Equity method investments		47.8		53.9			
Limited partnership investment		3.7		3.7			
Total investments in affiliated companies (Note 8)	\$	279.9	\$	291.4			

Gains and losses on our Cost Method Investments, which are included in other income and (expense), net in the Consolidated Statement of Operations, for the periods presented in the table below are as follows:

		Year	rs Er	nded Decembe	er 31	,
	2024 2023		2024 2023			2022
Current year gains	\$	6.4	\$	_	\$	
Current year losses		(8.3)		(15.9)		(4.8)

Cumulative unrealized gains and losses on our Cost Method Investments that we owned as of December 31, 2024 and 2023, as shown in our Cost Method Investment balances in the first table above, were as follows:

	A	as of the Year En	ded I	December 31,
		2024		2023
Cumulative unrealized gains	\$	50.8	\$	46.3
Cumulative unrealized losses		(30.9)		(23.9)

Earnings from equity method investments, which are included in other non-operating income and expense, and dividends received from equity method investments consisted of the following:

	 Years Ended December 31,						
	 2024	2023		2022			
Earnings from equity method investments (Note 19)	\$ 18.3	\$	16.3	\$	13.0		
Dividends received from equity method investments	16.5		18.8		11.6		

10. Other Current Liabilities

Other current liabilities consisted of the following:

	December 31, 2024		ember 31, 2023
Accrued payroll and employee benefits	\$ 269.8	\$	216.2
Accrued legal and regulatory matters (Note 21)	123.5		147.8
Deferred revenue (Note 15)	133.8		125.1
Accrued restructuring (Note 11)	13.8		64.9
Operating lease liabilities (Note 14)	22.0		26.2
Income taxes payable (Note 16)	37.3		10.2
Other	94.2		71.5
Total other current liabilities	\$ 694.4	\$	661.8

The increase in accrued payroll and employee benefits is due primarily to an increase in accrued bonus in 2024 compared to 2023.

11. Restructuring

On November 12, 2023, our Board of Directors ("Board") approved a transformation plan to optimize our operating model and continue to advance our technology. The transformation plan includes an operating model optimization program that will eliminate certain roles, transition certain job responsibilities to global capability centers, and reduce our facility footprint. The Company expects to record pre-tax expenses associated with the operating model optimization program of approximately \$155.0 million from the fourth quarter of 2023 through the end of 2025, consisting of approximately \$110.0 million of employee separation expenses and \$45.0 million of facility exit expenses. To date, we have incurred a total of \$142.1 million, including \$66.8 million recorded during the year ended December 31, 2024. The remaining costs associated with the transformation plan will be incurred during 2025.

In July 2024, as part of the transformation plan, the Company entered into an agreement to terminate a facility lease with an effective date of July 31, 2024. The Company accounted for the agreement as a modification to the existing lease. The termination of the lease resulted in the payment of a \$30.0 million early termination penalty during the year ended December 31, 2024. The Company recognized a loss on early termination of the lease of \$40.5 million, which includes expense of \$12.4 million principally associated with leasehold improvements in connection with terminating the lease.

The following table summarizes the expenses recorded for each respective period:

	Years Ended December 31			
	,	2024		2023
Employee separation	\$	24.7	\$	71.9
Facility exit		42.1		3.4
Total restructuring expenses	\$	66.8	\$	75.3

The following table summarizes the changes in the accrued restructuring during the years ended December 31, 2024 and 2023, which are included in other current liabilities on the Consolidated Balance Sheets.

	ployee tion Costs
Balance, December 31, 2022	\$
Restructuring expense	71.9
Cash payments	(7.2)
Foreign exchange rate adjustment	0.2
Balance, December 31, 2023	\$ 64.9
Restructuring expense	24.7
Cash payments	(75.7)
Foreign exchange rate adjustment	 (0.1)
Balance, December 31, 2024 (Note 10)	\$ 13.8

All restructuring expenses have been recorded in the Corporate unit, as these initiatives are predominantly centrally directed and controlled and are not included in internal measures of segment operating performance.

12. Other Liabilities

Other liabilities consisted of the following:

	December 31, 2024		ember 31, 2023
Operating lease liabilities (Note 14)	\$ 41.5	\$	81.8
Unrecognized tax benefits, net of indirect tax effects (Note 16)	40.4		40.2
Deferred revenue (Note 15)	13.7		15.1
Other	18.9		16.1
Total other liabilities	\$ 114.5	\$	153.2

Operating lease liabilities decreased as a result of a lease termination during the year ended December 31, 2024, see further discussion in Note 11, "Restructuring."

13. Debt

Debt outstanding consisted of the following:

	December 31, 2024	December 31, 2023
Senior Secured Term Loan B-5, due in full at maturity (November 15, 2026), with periodic variable interest at Term SOFR plus a credit spread adjustment, or alternate base rate, plus applicable margin (6.21% at December 31, 2024, and 7.21% at December 31, 2023), net of original issue discount and deferred financing fees of less than \$0.1 million and \$0.2 million, respectively, at December 31, 2024, and of \$1.9 million and \$4.6 million, respectively, at December 31, 2023	\$ 104.3	\$ 2,179.4
Senior Secured Term Loan A-4, payable in quarterly installments through June 24, 2029, with periodic variable interest at Term SOFR plus a credit spread adjustment (until the refinancing on June 24, 2024), or alternate base rate, plus applicable margin (5.86% at December 31, 2024 and 6.96% at December 31, 2023), net of original issue discount and deferred financing fees of \$0.4 million and \$3.3 million, respectively, at December 31, 2024, and of \$0.4 million and \$3.4 million, respectively, at December 31, 2023	1,271.9	1,296.1
Senior Secured Term Loan B-8, payable in quarterly installments through June 24, 2031, with periodic variable interest at Term SOFR, or alternate base rate, plus applicable margin (6.11% at December 31, 2024), net of original issue discount and deferred financing fees of \$4.2 million and \$6.1 million, respectively, at December 31, 2024	1,906.2	_
Senior Secured Term Loan B-9, payable in quarterly installments through June 24, 2031, with periodic variable interest at Term SOFR, or alternate base rate, plus applicable margin (6.11% at December 31, 2024), net of original issue discount and deferred financing fees of \$7.9 million and \$12.9 million, respectively, at December 31, 2024	1,864.8	_
Senior Secured Term Loan B-6, refinanced with Term Loan B-7 (which was subsequently refinanced with Term Loan B-9), with periodic variable interest at Term SOFR plus a credit spread adjustment, or alternate base rate, plus applicable margin (7.72% at December 31, 2023), net of original issue discount and deferred financing fees of \$3.5 million and \$20.0 million, respectively, at December 31, 2023	_	1,864.8
Senior Secured Revolving Credit Facility		
Total debt	5,147.2	5,340.4
Less: current portion of long-term debt	(70.6)	(89.6)
Total long-term debt	\$ 5,076.6	\$ 5,250.8

Excluding any potential additional principal payments which may become due on the Senior Secured Credit Facility based on excess cash flows of the prior year, scheduled future maturities of total debt at December 31, 2024, were as follows:

2025	\$ 70.6
2026	191.4
2027	103.1
2028	103.1
2029	1,102.5
Thereafter	3,611.4
Unamortized original issue discounts and deferred financing fees	 (34.9)
Total debt	\$ 5,147.2

Senior Secured Credit Facility

On June 15, 2010, we entered into a Senior Secured Credit Facility with various lenders. This facility has been amended several times and currently consists of the Senior Secured Term Loan B-9, Senior Secured Term Loan B-8, Senior Secured Term Loan B-5, Senior Secured Term Loan A-4 (collectively, the "Senior Secured Term Loans"), and the Senior Secured Revolving Credit Facility.

On October 27, 2023, we executed Amendment No. 21 to the Senior Secured Credit Facility, pursuant to which we entered into Senior Secured Term Loan A-4 with an aggregate principal amount of \$1.3 billion, the proceeds of which were used to repay Senior Secured Term Loan A-3 in full, repay \$300.0 million of Senior Secured Term Loan B-6, and pay the related financing fees and expenses. In addition, we increased the borrowing capacity on the Senior Secured Revolving Credit Facility from \$300.0 million to \$600.0 million and extended the maturity date from December 10, 2024 to October 27, 2028. In connection with the refinancing, we expensed \$5.9 million of the unamortized original issue discount, deferred financing fees, and other related fees to other income and (expense), net in the Consolidated Statements of Operations for the year ended December 31, 2023. Additionally, we recorded incremental deferred financing fees of \$4.8 million that will be amortized over the new loan term. Senior Secured Term Loan A-4 is a syndicated debt instrument. As a result of the refinancing, we repaid \$347.7 million of principal to lenders who left the syndicate and received \$655.8 million of principal from new or existing lenders.

On February 8, 2024, we executed Amendment No. 22 to the Senior Secured Credit Facility, pursuant to which we entered into Senior Secured Term Loan B-7 with an aggregate principal amount of \$1.9 billion, the proceeds of which were used to repay Senior Secured Term Loan B-6 in full and pay the related financing fees and expenses. In connection with the refinancing, we incurred incremental deferred financing fees of \$4.7 million that will be amortized over the new loan term. Senior Secured Term Loan B-7 was a syndicated debt instrument. As a result of the refinancing, we repaid \$257.1 million of principal to exiting lenders and to lenders where the refinancing resulted in a reduction in principal and received \$264.1 million of proceeds from new lenders and additional principal from existing lenders.

On June 24, 2024, we executed Amendment No. 23 to the Senior Secured Credit Facility, pursuant to which we entered into Senior Secured Term Loan B-8 with an aggregate principal amount of \$1.5 billion, the proceeds of which were used to repay a portion of Senior Secured Term Loan B-5. The maturity date of the Senior Secured Credit Facility and Senior Secured Term Loan A-4 were also extended from October 27, 2028 to June 24, 2029, subject to a springing maturity of 91 days prior to the maturity date of certain long-term indebtedness, if, on such date, the principal amount of such indebtedness exceeds \$250 million, and the credit spread adjustment was removed from the periodic interest rate for both instruments. In connection with the refinancing, we incurred incremental deferred financing fees of \$8.7 million that will be amortized over the new loan terms. Senior Secured Term Loan B-8 is a syndicated debt instrument. As a result of the refinancing, we repaid \$670.8 million of principal to exiting lenders and to lenders where the refinancing resulted in a reduction in principal and received \$670.8 million of proceeds from new lenders and additional principal from existing lenders.

On December 12, 2024, we executed Amendment No. 24 to the Senior Secured Credit Facility, pursuant to which we entered into Senior Secured Term Loan B-9 with an aggregate principal amount of \$1.9 billion, the proceeds of which were used to repay in full Senior Secured Term Loan B-7. In addition, we increased the principal on Senior Secured Term Loan B-8 by \$425.0 million and used the increase in proceeds to repay a portion of Senior Secured Term Loan B-5. In connection with the refinancing, we incurred incremental deferred financing fees of \$3.0 million that will be amortized over the new loan terms. Senior Secured Term Loan B-9 is a syndicated debt instrument. As a result of the refinancing, we repaid \$858.3 million of principal to exiting lenders and to lenders where the refinancing resulted in a reduction in principal and received \$858.3 million of proceeds from new lenders and additional principal from existing lenders.

During the year ended December 31, 2024, we recognized \$17.8 million of expense related to unamortized original issue discount, deferred financing fees, and other related fees associated with the 2024 refinancings in other income and (expense), net in the Consolidated Statements of Operations.

During 2024, we prepaid \$150.0 million of our Senior Secured Term Loan B-5, funded from cash-on-hand, and expensed \$0.3 million of unamortized original issue discounts and deferred financing fees to other income and (expense), net in the Consolidated Statements of Operations. During 2023 and 2022, we prepaid \$250.0 million and \$600.0 million, respectively, of our Senior Secured Term Loan B-6, funded from our cash on hand. As a result of these prepayments, we expensed \$3.4 million and \$9.3 million in each respective year of the unamortized original issue discount and deferred fees to other income and (expense), net in the Consolidated Statements of Operations.

Interest rates on the Senior Secured Term Loan B-5 are based on Term SOFR, unless otherwise elected, plus a margin of 1.75%, plus a credit spread adjustment. The remaining balance is due in full on November 15, 2026.

Interest rates on Senior Secured Term Loan A-4 are based on Term SOFR, unless otherwise elected, plus a margin of 1.25%, 1.50% or 1.75% depending on our total net leverage ratio. The Company is required to make principal payments of 0.625%, of the 2023 refinanced principal balance, at the end of each quarter through June 2026; principal payments increase to 1.25% each quarter thereafter with the remaining balance due June 24, 2029.

Interest rates on the Senior Secured Term Loan B-8 are based on Term SOFR, unless otherwise elected, plus a margin of 1.75%. The Company is required to make principal payments at the end of each quarter of \$4.8 million with the remaining balance due June 24, 2031.

Interest rates on the Senior Secured Term Loan B-9 are based on Term SOFR with a floor of 0.50%, unless otherwise elected, plus a margin of 1.75%. The Company is required to make principal payments at the end of each quarter of 0.25% of the 2024 refinanced principal balance with the remaining balance due June 24, 2031.

Interest rates on the Senior Secured Revolving Credit Facility are based on Term SOFR, unless otherwise elected, plus a margin of 1.25%, 1.50% or 1.75% depending on our total net leverage ratio. There is a 0.20%, 0.25% or 0.30% annual commitment fee, depending on our total net leverage ratio, payable quarterly based on the undrawn portion of the Senior Secured Revolving Credit Facility. The commitment under the Senior Secured Revolving Line of Credit expires on June 24, 2029.

The Company may be required to make additional payments based on excess cash flows of the prior year, as defined in the agreement. Depending on the senior secured net leverage ratio for the year, a principal payment of between zero and fifty percent of the excess cash flows will be due the following year. There is no required excess cash flow payment due for 2024. Additional payments based on excess cash flows could be due in future years.

As of December 31, 2024, we have no outstanding balance under the Senior Secured Revolving Credit Facility and \$1.2 million of outstanding letters of credit and an available borrowing balance of \$598.8 million.

TransUnion also has the ability to request incremental loans on the same terms under the Senior Secured Credit Facility up to the sum of the greater of \$1,000.0 million and 100% of Consolidated EBITDA, minus the amount of secured indebtedness and the amount incurred prior to the incremental loan, and may incur additional incremental loans so long as the senior secured net leverage ratio does not exceed 4.25-to-1, subject to certain additional conditions and commitments by existing or new lenders to fund any additional borrowings.

With certain exceptions, the Senior Secured Credit Facility obligations are secured by a first-priority security interest in substantially all of the assets of Trans Union LLC, including its investment in subsidiaries. The Senior Secured Credit Facility contains various restrictions and nonfinancial covenants, along with a senior secured net leverage ratio test. The nonfinancial covenants include restrictions on dividends, investments, dispositions, future borrowings and other specified payments, as well as additional reporting and disclosure requirements. The senior secured net leverage test must be met as a condition to incur additional indebtedness, make certain investments, and may be required to make certain restricted payments. The senior secured net leverage ratio must not exceed 5.5-to-1 at any such measurement date. Under the terms of the Senior Secured Credit Facility, TransUnion may make dividend payments up to the greater of \$100 million or 10.0% of Consolidated EBITDA per year, or an unlimited amount provided that no default or event of default exists and so long as the total net leverage ratio does not exceed 4.75-to-1. As of December 31, 2024, we were in compliance with all debt covenants.

Interest Rate Hedging

In 2024, we entered into interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loan or similar replacement debt. The swaps commence on December 31, 2024, and expire on December 31, 2027, with a current aggregate notional amount of \$1,100.0 million that amortizes each quarter beginning the first quarter 2025. The swaps require us to pay fixed rates varying between 3.0650% and 3.9925% in

exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

On November 16, 2022, we entered into interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loan or similar replacement debt. The swaps commenced on December 30, 2022, and expired on December 31, 2024. We designated these swap agreements as cash flow hedges.

On December 23, 2021, we entered into interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loan or similar replacement debt. The swaps commenced on December 31, 2021, and expire on December 31, 2026, with a current aggregate notional amount of \$1,552.0 million that amortizes each quarter. The swaps require us to pay fixed rates varying between 1.3800% and 1.3915% in exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

On March 10, 2020, we entered into two interest rate swap agreements with various counterparties that effectively fix our variable interest rate exposure on a portion of our Senior Secured Term Loans or similar replacement debt. The first swap commenced on June 30, 2020, and expired on June 30, 2022. The second swap commenced on June 30, 2022, and expires on June 30, 2025, with a current aggregate notional amount of \$1,060.0 million that amortizes each quarter after it commences. The second swap requires us to pay fixed rates varying between 0.8680% and 0.8800% in exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

The net change in the fair value of our hedging instruments, included in our assessment of hedge effectiveness, is recorded in other comprehensive income, and reclassified to interest expense when the corresponding hedged debt affects earnings. See further discussion in Note 22, "Accumulated Other Comprehensive Loss."

We expect to realize gains of approximately \$78.0 million as a reduction of interest expense from our interest rate hedges over the next twelve months.

Fair Value of Debt

The fair value of our variable-rate term loans, excluding original issue discounts and deferred fees, are \$5,165.6 million and \$5,378.5 million as of December 31, 2024 and 2023, respectively. The fair values of our variable-rate term loans are determined using Level 2 inputs, based on quoted market prices for the publicly traded instruments.

14. Leases

Our lease obligations consist of operating leases for office space and data centers. Our operating leases have remaining lease terms of up to 7.8 years. As of December 31, 2024 and 2023, the weighted-average remaining lease terms were 3.5 years and 6.1 years, respectively. As of December 31, 2024 and 2023, the weighted-average discount rate at lease inception used to calculate the present value of the fixed future lease payments were 5.7% and 4.5%, respectively.

For the years ended December 31, 2024, 2023 and 2022 our operating lease costs, including fixed, variable and short-term lease costs, were \$43.0 million, \$39.7 million and \$44.5 million, respectively. Cash paid for operating leases are included in operating cash flows and were \$39.9 million, \$39.4 million and \$36.5 million, for the years ended December 31, 2024, 2023 and 2022, respectively.

Future fixed payments for non-cancelable operating leases in effect as of December 31, 2024 are payable as follows:

2025	¢	24.2
	\$	24.2
2026		20.2
2027		12.6
2028		6.5
2029		2.9
Thereafter		3.5
Total operating lease payments		69.9
Less imputed interest		(6.4)
Totals	\$	63.4

15. Revenue

Accounts receivable are presented separately on our balance sheet. Contract assets and liabilities result due to the timing of revenue recognition, billings, and cash collections. Contract assets include our right to payment for goods and services already transferred to a customer when the right to payment is conditional on something other than the passage of time, for example, contracts pursuant to which we recognize revenue over time but do not have a contractual right to payment until we complete the contract. Contract assets are included in our other current assets and are not material as of December 31, 2024 and 2023.

As most of our contracts with customers have a duration of one year or less, our contract liabilities consist of deferred revenue that is primarily short-term in nature. Contract liabilities include current and long-term deferred revenue that is included in other current liabilities and other liabilities. We recognized substantially all of the December 31, 2023 current deferred revenue balance as revenue during 2024. We expect to recognize the December 31, 2024 current deferred revenue balance as revenue during 2025. The majority of our long-term deferred revenue, which is not material, is expected to be recognized in less than two years.

We have certain contracts that have a duration of more than one year. For these contracts, the transaction price allocable to the future performance obligations is primarily fixed but contains a variable component. As of December 31, 2024, the aggregate amount of transaction price attributable to future performance obligations for long-term non-cancellable contracts, excluding the variable component, totals approximately \$800 million. We expect to recognize approximately 50% of this amount in 2025, 30% in 2026 and 20% thereafter.

For additional disclosures about the disaggregation of our revenue see Note 19, "Reportable Segments."

16. Income Taxes

The provision for income taxes consisted of the following:

	Years Ended December 31,						
	2024		2023		2022		
Federal							
Current	\$ 130.3	\$	100.0	\$	101.8		
Deferred	(122.3)		(102.1)		(55.9)		
State							
Current	24.9		11.1		28.7		
Deferred	(18.7)		(28.3)		(14.6)		
Foreign							
Current	100.9		96.3		77.3		
Deferred	 (16.3)		(32.3)		(18.4)		
Provision for income taxes	\$ 98.8	\$	44.7	\$	118.9		

The components of income before income taxes consisted of the following:

	Years Ended December 31,							
		2024		2023		2022		
Domestic	\$	9.7	\$	(40.6)	\$	151.5		
Foreign		391.4		(104.7)		231.5		
Income (loss) from continuing operations before income taxes	\$	401.1	\$	(145.3)	\$	383.0		

The effective income tax rate reconciliation consisted of the following:

	Years Ended December 31,								
	202	24	20	23	202	22			
Income taxes at statutory rate	\$ 84.2	21.0 %	\$ (30.5)	21.0 %	\$ 80.4	21.0 %			
Increase (decrease) resulting from:									
State taxes, net of federal benefit	0.1	— %	(21.9)	15.1 %	8.0	2.1 %			
Foreign rate differential	(6.7)	(1.7)%	(22.5)	15.5 %	(4.6)	(1.2)%			
Excess tax (benefits) / expense on stock-based compensation	(1.5)	(0.4)%	3.0	(2.0)%	(5.0)	(1.3)%			
Uncertain tax positions	6.0	1.5 %	7.5	(5.2)%	5.7	1.5 %			
Valuation allowances	(11.3)	(2.8)%	3.1	(2.1)%	18.3	4.7 %			
Foreign withholding taxes	13.7	3.4 %	13.0	(8.9)%	9.6	2.5 %			
U.S. Federal tax on foreign earnings	13.6	3.4 %	0.2	(0.1)%	(1.4)	(0.4)%			
U.S. Federal R&D tax credit	(8.1)	(2.0)%	(8.6)	5.9 %	(9.7)	(2.5)%			
Nondeductible expenses	14.9	3.7 %	6.8	(4.7)%	14.0	3.6 %			
Nondeductible goodwill impairment	_	— %	97.3	(67.0)%	_	— %			
Other	(6.1)	(1.5)%	(2.7)	1.7 %	3.6	1.0 %			
Total	\$ 98.8	24.6 %	\$ 44.7	(30.8)%	\$118.9	31.0 %			

For 2024, we reported a 24.6% effective tax rate, which is higher than the 21.0% U.S. federal corporate statutory rate due primarily to nondeductible expenses primarily in connection with executive compensation limitations, foreign withholding taxes, and uncertain tax positions, partially offset by benefits from the research and development credit and the foreign rate differential. In addition, certain deferred tax assets related to expiring foreign tax credits were written off with an offsetting reduction of the valuation allowance.

For 2023, we reported a (30.8)% effective tax rate, which is lower than the 21.0% U.S. federal corporate statutory rate due primarily to the impact of non-deductible goodwill impairment partially offset by benefits on the remeasurement of deferred taxes due to changes in state apportionment rates.

For 2022, we reported a 31.0% effective tax rate, which is higher than the 21.0% U.S. federal corporate statutory rate due primarily to increases in valuation allowances on foreign tax credit carryforwards, nondeductible expenses in connection with certain legal and regulatory matters and executive compensation limitations, and other rate-impacting items, partially offset by benefits from the research and development credit and excess tax benefits on stock-based compensation.

Components of net deferred income tax consisted of the following:

	Dec	cember 31, 2024	December 31, 2023	
Deferred income tax assets:				
Compensation	\$	20.7	\$	21.7
Employee benefits		33.6		38.4
Legal reserves and settlements		10.4		11.0
Loss and tax credit carryforwards		293.0		228.0
Leases		15.2		26.9
Section 174 R&D Expense		88.6		58.1
Other		35.1		36.3
Gross deferred income tax assets	\$	496.6	\$	420.4
Valuation allowance		(93.4)		(104.7)
Total deferred income tax assets, net	\$	403.2	\$	315.7
Deferred income tax liabilities:				
Depreciation and amortization		(718.0)		(789.8)
Right of use asset		(14.6)		(25.1)
Taxes on unremitted foreign earnings		(25.2)		(24.0)
Investment in affiliated companies		(8.0)		(7.6)

Cash flow hedges	(27.6)	(40.6)
Other	(15.0)	(10.4)
Total deferred income tax liability	\$ (808.4)	\$ (897.5)
Net deferred income tax liability	\$ (405.2)	\$ (581.8)

Deferred tax assets and liabilities result from temporary differences between tax and accounting methods. Our balance sheet includes deferred tax assets of \$10.1 million and \$11.1 million at December 31, 2024 and 2023, respectively, which are included in other assets.

If certain deferred tax assets are not likely recoverable in future years a valuation allowance is recorded. As of December 31, 2024 and 2023, a valuation allowance of \$93.4 million and \$104.7 million, respectively, reduced deferred tax assets related to worldwide net operating losses and tax credit carryforwards. Our estimate of the amount of the deferred tax asset we can realize requires significant assumptions about projected revenues and income that are impacted by future market and economic conditions. Our carryforwards will expire as follows: U.S. federal net operating loss carryforwards over three years to an indefinite number of years, foreign loss carryforwards over one year to an indefinite number of years, state net operating loss carryforwards over one year to an indefinite number of years, state net operating loss carryforwards over one year to an indefinite number of years. As of December 31, 2024, the deferred tax assets associated with U.S. foreign tax credit carryforwards and U.S. federal net operating loss carryforwards were \$48.4 million and \$6.3 million, respectively. Deferred tax assets associated with foreign net operating loss carryforwards and foreign interest expense carryforwards were \$27.0 million and \$73.2 million, respectively. Deferred tax assets associated with U.S. federal and state interest expense carryforwards is \$110.4 million. Deferred tax assets associated with other loss and tax credit carryforwards were not significant.

The total amount of gross unrecognized tax benefits consisted of the following:

	Dec	December 31, 2024		l, I	December 31, 2022
Balance as of beginning of period	\$	45.0	\$ 45	.1 \$	45.8
Increase in tax positions of prior years		0.8	2	.2	0.3
Decrease in tax positions of prior years		(1.0)	(3	.4)	(3.7)
Increase in tax positions of current year		3.3	3	.0	3.2
Reductions relating to settlement and lapse of statute		(3.7)	(1	.9)	(0.4)
Decrease in tax positions due to acquisition					(0.1)
Balance as of end of period	\$	44.4	\$ 45	.0 \$	45.1

The amounts that would affect the effective tax rate if recognized are \$34.4 million, \$34.5 million and \$30.5 million, respectively, for the years ended December 31, 2024, 2023 and 2022.

We classify interest and penalties as income tax expense in the Consolidated Statements of Operations and their associated liabilities as other liabilities in the Consolidated Balance Sheets. Interest and penalties on unrecognized tax benefits were \$17.7 million, \$14.0 million and \$10.1 million, respectively, for the years ended December 31, 2024, 2023 and 2022.

We are regularly audited by federal, state and foreign taxing authorities. Given the uncertainties inherent in the audit process, it is reasonably possible that certain audits could result in a significant increase or decrease in the total amounts of unrecognized tax benefits. An estimate of the range of the increase or decrease in unrecognized tax benefits due to audit results cannot be made at this time. Tax years 2007 and forward remain open for examination in some foreign jurisdictions, 2015 and forward in some state jurisdictions, and 2012 and forward for U.S. federal purposes.

17. Stock-Based Compensation

Under the TransUnion Holding Company, Inc. 2012 Management Equity Plan (the "2012 Plan"), stock-based awards could be issued to executive officers, employees and independent directors of the Company. A total of 10.1 million shares were authorized for grant under the 2012 Plan. Effective upon the closing of our initial public offering, the Company's Board and its stockholders adopted the TransUnion 2015 Omnibus Incentive Plan, which has since been amended and restated (the "2015 Plan"), and no more shares can be issued under the 2012 Plan. During 2024, we increased the authorized shares available under the 2015 Plan to a total of 16.4 million shares. The 2015 Plan provides for the granting of stock options, restricted stock awards and restricted stock units to key employees, directors or other persons having a service relationship with the Company and its affiliates. Dividends declared accrue to outstanding restricted stock units and are paid to employees when the restricted stock units vest. As of December 31, 2024, there were approximately 3.8 million of unvested awards outstanding and approximately 6.9 million of awards have vested under the 2015 Plan.

Effective upon the closing of the initial public offering, the Company's Board and its stockholders adopted the TransUnion 2015 Employee Stock Purchase Plan, which has since been amended and restated (the "ESPP"). During 2024, we increased the authorized shares under the ESPP to a total of 5.4 million shares. The ESPP provides certain employees of the Company with an opportunity to purchase the Company's common stock at a discount. As of December 31, 2024, the Company has issued approximately 2.1 million shares of common stock under the ESPP.

For the years ending December 31, 2024, 2023 and 2022, stock-based compensation expense and the related income tax benefits were as follows:

	Years Ended December 31,									
	2024		2023		2022					
Equity-classified awards	\$ 117.3	\$	95.4	\$	79.6					
Liability-classified awards			0.2		(1.7)					
Subtotal of 2012 and 2015 plans	117.3		95.6		77.8					
ESPP stock-based compensation expense	3.9		4.9		3.3					
Total stock-based compensation expense	\$ 121.2	\$	100.6	\$	81.1					
Income tax benefits related to stock-based compensation	\$ 17.5	\$	17.2	\$	13.5					

2012 Plan

Stock Options

Stock options were last granted in June 2015, prior to our initial public offering, and expire in June 2025. As of December 31, 2024, there are less than 0.1 million stock options outstanding.

2015 Plan

Restricted Stock Units

For our 2024 performance-based restricted stock units based on TSR, the volatility inputs for our stock ranged between 37.54% and 40.74%, and the risk-free interest rate inputs ranged between 3.80% and 4.46%.

Following is a summary of service-based restricted stock units and performance-based restricted stock units as of and for the year ended December 31, 2024:

	Service-based un		Performance-b			
	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value		
Nonvested as of December 31, 2023	1,962,349	\$ 74.87	1,444,354	\$ 97.78		
Granted	1,491,536	76.89	497,148	97.00		
Vested	(795,480)	79.22	(251,078)	91.39		
Forfeited	(332,511)	73.70	(187,395)	96.37		
Nonvested as of December 31, 2024	2,325,894	\$ 74.85	1,503,029	\$ 98.09		
Expected to vest as of December 31, 2024			1,679,137	\$ 94.01		

The intrinsic value of awards vested, the fair value of awards vested and the tax benefit realized from vested awards for the periods presented are as follows:

	Years Ended December 31,							
	 2024		2023		2022			
Intrinsic value of awards vested	\$ 91.6	\$	54.6	\$	90.3			
Total fair value of awards vested	86.0		71.7		76.0			
Tax benefit realized from vested awards	16.2		10.1		14.2			

As of December 31, 2024, stock-based compensation expense remaining to be recognized in future years related to restricted stock units that we currently expect to vest was \$204.9 million with weighted-average recognition periods of 2.0 years.

Weighted-average shares outstanding include the dilutive impact of our unvested stock-based awards.

18. Fair Value

The following table summarizes financial instruments measured at fair value, on a recurring basis, as of December 31, 2024:

	Total	for Identical Signification		Level 2 - nificant Other servable Input	Level 3 - Significant Unobservable Inputs	
<u>Assets</u>						
Interest rate swaps (Note 8 and 13)	\$ 110.0	\$	_	\$	110.0	\$ _
Note receivable (Note 3, 4 and 8)	89.7		<u> </u>		89.7	
Available-for-sale debt securities (Note 4)	2.5		_		2.5	
Total	\$ 202.2	\$	_	\$	202.2	\$ _

The following table summarizes financial instruments measured at fair value, on a recurring basis, as of December 31, 2023:

	Total	Level 1 - Prices in Active Markets for Identical Assets Level 2 - Significant Other Observable Input		Level 3 - Significant Unobservable Inputs	
<u>Assets</u>					
Interest rate swaps (Note 8 and 13)	\$ 162.3	\$	_	\$ 162.3	\$
Note receivable (Note 2 and 8)	82.0		<u> </u>	82.0	_
Available-for-sale debt securities (Note 4)	2.7		_	2.7	_
Total	\$ 247.0	\$	_	\$ 247.0	\$ _

Level 2 instruments consist of foreign exchange-traded corporate bonds, interest rate swaps, and notes receivable. Foreign exchange-traded corporate bonds are available-for-sale debt securities valued at their current quoted prices. These securities mature between 2027 and 2033. Unrealized gains and losses on available-for-sale debt securities, which are not material, are included in other comprehensive income. The interest rate swaps fair values are determined using the market standard methodology of discounting the future expected net cash receipts or payments that would occur if variable interest rates rise above or fall below the fixed rates of the swaps. The variable interest rates used in the calculations of projected receipts on the swaps are based on an expectation of future interest rates derived from observable market interest rate curves and volatilities. As discussed in Note 13, "Debt," there are three tranches of interest rate swaps. In December 2022, we sold the non-core businesses of our VF acquisition. A portion of the consideration was in the form of a \$72.0 million note receivable. The note receivable accrues interest semiannually at a per annum rate of 10.6% and is payable at maturity. The note matures on June 30, 2025, subject to an option of the note issuer to extend the maturity date for two successive terms of three months each, at an increased rate of interest at each extension. The note is classified as current as of December 31, 2024 because repayment is required no later than December 31, 2025 when considering the two optional extensions. The note was initially recorded at fair value of \$70.3 million using an income approach for fixed income securities where contractual cash flows were discounted to present value at a risk-adjusted rate of return in a lattice model framework. The fair value of the note is determined each period by applying the same approach, considering changes to the risk-adjusted rate of return given observed changes to the interest rate environment, market pricing of credit risk, and issuer-specific credit risk.

19. Reportable Segments

The Company's chief operating decision maker is the chief executive officer. The Company's operating segments, which are consistent with its reportable segments, reflect the structure of the Company's internal organization, the method by which the Company's resources are allocated and the manner by which the CODM assesses the Company's performance. Our CODM uses the profit measure of Adjusted EBITDA for its segments to allocate resources and assess performance of our businesses. We use Adjusted EBITDA as our profit measure because it eliminates the impact of certain items that we do not consider indicative of operating performance, which is useful to compare operating results between periods. The CODM uses Adjusted EBITDA for each segment predominantly in the annual budget and forecasting process. The CODM considers budget-to-actual variances on a quarterly basis when making decisions about the allocation of operating and capital resources to each segment.

Our Board and executive management team also use Adjusted EBITDA as a compensation measure for both segment and corporate management under our incentive compensation plans. Adjusted EBITDA is also a measure frequently used by securities analysts, investors, and other interested parties in their evaluation of the operating performance of companies similar to ours.

As discussed in Note 1, "Significant Accounting Policies," during the first quarter of 2024, we reorganized our operations into two operating segments and the segment financial information presented below has been recast to conform to our current

operating structure. The accounting policies of the segments are the same as described in Note 1, "Significant Accounting Policies"

The following is a more detailed description of our reportable segments and the Corporate unit:

U.S. Markets

The U.S. Markets segment provides consumer reports, actionable insights and analytics to businesses and consumers. Businesses use our services to acquire customers, assess consumers' ability to pay for services, identify cross-selling opportunities, measure and manage debt portfolio risk, collect debt, verify consumer identities, mitigate fraud risk and respond to data breach events. Consumers use our services to manage their personal finances and take precautions against identity theft. We report disaggregated revenue of our U.S. Markets segment for Financial Services, Emerging Verticals and Consumer Interactive.

- *Financial Services:* The Financial Services vertical consists of our Consumer Lending, Mortgage, Auto and Card and Banking lines of business. Our Financial Services clients consist of most banks, credit unions, finance companies, auto lenders, mortgage lenders, FinTechs, and other consumer lenders in the United States. We also distribute our solutions through most major resellers, secondary market players and sales agents. Beyond traditional lenders, we work with a variety of credit arrangers, such as auto dealers and peer-to-peer lenders. We provide solutions across every aspect of the lending lifecycle; customer acquisition and engagement, fraud and ID management, retention and recovery. Our products are focused on mitigating risk and include credit reporting, credit marketing, analytics and consulting, identity verification and authentication and debt recovery solutions.
- *Emerging Verticals:* Emerging Verticals include Insurance, Technology, Retail and E-Commerce, Telecommunications, Media, Tenant & Employment Screening, Collections, and Public Sector. Our solutions in these verticals are also data-driven and address the entire customer lifecycle. We offer onboarding and transaction processing products, scoring and analytic products, marketing solutions, fraud and identity management solutions and customer retention solutions, as well select market-specific solutions in Insurance and Telecommunications.
- Consumer Interactive: Consumer Interactive provides solutions that help consumers manage their personal finances and take precautions against identity theft. Services include paid and free credit reports, scores and freezes, credit monitoring, identity protection and resolution, and financial management for consumers. This vertical also provides solutions that help businesses respond to data breach events. Our products are provided through user-friendly online and mobile interfaces and are supported by educational content and customer support. Our Consumer Interactive vertical serves consumers through both direct and indirect channels.

International

The International segment provides services similar to our U.S. Markets segment to businesses in select regions outside the United States. Depending on the maturity of the credit economy in each country, services may include credit reports, analytics and solutions services, and other value-added risk management services. In addition, we have insurance, business, and automotive databases in select geographies. These services are offered to customers in a number of industries including financial services, insurance, automotive, collections, and communications and are delivered through both direct and indirect channels. The International segment also provides consumer services similar to those offered by our Consumer Interactive vertical in our U.S. Markets segment that help consumers proactively manage their personal finances and take precautions against identity theft.

We report disaggregated revenue of our International segment for the following regions: Canada, Latin America, the United Kingdom, Africa, India, and Asia Pacific.

Corporate

Corporate provides support services for each of the segments, holds investments, and conducts enterprise functions. Certain costs incurred in Corporate that are not directly attributable to either of the segments remain in Corporate. These costs are typically enterprise-level costs and are primarily administrative in nature.

Selected segment financial information and disaggregated revenue consisted of the following:

	Years Ended December 31,							
		2024		2023		2022		
Gross Revenue:								
U.S. Markets:								
Financial Services	\$	1,433.8	\$	1,244.9	\$	1,225.6		
Emerging Verticals		1,215.5		1,168.2		1,128.1		
Consumer Interactive		588.7		579.7		585.3		
Total U.S. Markets		3,237.9		2,992.8		2,939.0		
International:								
Canada		154.4		140.5		129.7		
Latin America		134.7		121.8		114.3		
United Kingdom		227.7		216.6		222.7		
Africa		66.4		60.6		61.8		
India		269.4		218.9		174.2		
Asia Pacific		105.8		91.9		80.3		
Total International		958.4		850.4		782.9		
Total revenue, gross	\$	4,196.3	\$	3,843.1	\$	3,722.0		
Intersegment revenue eliminations:								
U.S. Markets	\$	(6.2)	\$	(6.2)	\$	(6.1)		
International		(6.4)		(5.7)		(6.0)		
Total intersegment eliminations		(12.6)		(11.9)		(12.1)		
Total revenue as reported	\$	4,183.8	\$	3,831.2	\$	3,709.9		

Significant segment expenses consisted of the following:

		Years Ended December 31,												
		20	24		2023					2022				
	U.S	U.S. Markets International			U.S	U.S. Markets International				S. Markets	Inte	rnational		
Gross Revenue	\$	3,237.9	\$	958.4	\$	2,992.8	\$	850.4	\$	2,939.0	\$	782.9		
Less:1														
Product and fulfillment ²		679.8		46.5		558.5		41.6		475.2		45.8		
Labor-related ³		821.4		340.0		855.0		309.3		847.8		281.2		
Technology and communication ⁴		230.9		43.6		223.4		39.0		219.4		33.4		
Other segment items ⁵		273.1		102.8		236.8		92.9		252.6		85.8		
Segment Adjusted EBITDA	\$	1,232.8	\$	425.5	\$	1,119.0	\$	367.5	\$	1,144.0	\$	336.7		

- 1. The significant expense categories and amounts align with costs included in segment Adjusted EBITDA that are regularly provided to the CODM. Intersegment expenses are included within the amounts shown.
- 2. Product and fulfillment expenses principally include data acquisition and royalty fees, mailing and postage, and call center support costs.
- 3. Labor-related expenses include fully burdened compensation expenses, including incentive compensation, as well as costs incurred to augment our workforce with subcontractors, net of any amounts capitalized for internally developed software.
- 4. Technology and communication expenses includes hardware and software maintenance and support, subscriptions to cloud-based software, and telecommunications.

5. Other segment items includes litigation, facilities costs, marketing and advertising, professional services, travel and entertainment, earnings from equity method investments, and overhead and corporate allocations, among other costs. For the International segment, Other segment items also includes earnings attributable to non-controlling interests.

A reconciliation of Segment Adjusted EBITDA to income (loss) from continuing operations before income taxes for the periods presented is as follows:

	Years Ended December 31,					31,
		2024		2023		2022
U.S. Markets Adjusted EBITDA	\$	1,232.8	\$	1,119.0	\$	1,144.0
International Adjusted EBITDA		425.5		367.5		336.7
Total	\$	1,658.3	\$	1,486.5	\$	1,480.7
Adjustments to reconcile to income (loss) from continuing operations before income taxes:						
Corporate expenses ¹		(152.0)		(142.8)		(135.7)
Net interest expense		(236.7)		(267.5)		(226.2)
Depreciation and amortization		(537.8)		(524.4)		(519.0)
Stock-based compensation		(121.2)		(100.6)		(81.1)
Goodwill impairment				(414.0)		
Mergers and acquisitions, divestitures and business ²		(26.5)		(34.6)		(50.7)
Accelerated technology investment ³		(84.2)		(70.6)		(54.0)
Operating model optimization program ⁴		(94.8)		(77.6)		
Net other ⁵		(21.8)		(15.2)		(46.1)
Net income attributable to non-controlling interests		18.0		15.4		15.2
Total adjustments	\$	(1,257.1)	\$	(1,631.8)	\$	(1,097.7)
Income (loss) from continuing operations before income taxes	\$	401.1	\$	(145.3)	\$	383.0

- 1. Certain costs that are not directly attributable to either of the segments remain in Corporate. These costs are typically enterprise-level costs and are primarily administrative in nature.
- 2. Mergers and acquisitions, divestitures and business optimization expenses consist of costs associated with exploratory or executed strategic transactions.
- 3. Accelerated technology investment represents expenses incurred in connection with the transformation of our technology infrastructure.
- 4. Consists of restructuring expenses as presented on our Consolidated Statements of Operations and other business process optimization expenses.
- 5. Net other expenses consist primarily of other non-operating income and expenses, comprised of deferred loan fee expense from debt prepayments and refinancing, currency remeasurement on foreign operations, and other debt financing expenses, as well as certain legal and regulatory expenses.

Earnings from equity method investments included in non-operating income and expense was as follows:

	Years Ended December 31,						
	20		2024			2022	
U.S. Markets	\$	0.1	\$	0.6	\$	1.0	
International		18.1		15.7		12.0	
Total	\$	18.3	\$	16.3	\$	13.0	

Total assets by segment consisted of the following:

	De	cember 31, 2024	D	ecember 31, 2023
U.S. Markets	\$	8,089.1	\$	8,293.4
International		2,384.5		2,368.6
Total segment assets		10,473.6		10,662.0
Corporate		511.2		443.2
Total assets	\$	10,984.8	\$	11,105.1

Cash paid for capital expenditures by segment was as follows:

	Years Ended December 31,							
		2024		2023		2022		
U.S. Markets	\$	210.9	\$	222.2	\$	198.7		
International		104.4		87.3		97.5		
Total cash paid for capital expenditures by the segments		315.4		309.4		296.2		
Corporate		0.4		1.3		2.0		
Total	\$	315.8	\$	310.7	\$	298.2		

Depreciation and amortization expense by segment was as follows:

	Years Ended December 31,							
		2024		2023		2022		
U.S. Markets	\$	400.5	\$	393.6	\$	387.2		
International		133.3		126.4		126.9		
Total segment depreciation and amortization expense		533.9		520.1		514.1		
Corporate		3.9		4.4		4.9		
Total	\$	537.8	\$	524.4	\$	519.0		

Percentage of revenue based on where it was earned was as follows:

	Year	Years Ended December 31,						
	2024	2023	2022					
Domestic	77 %	78 %	79 %					
International	23 %	22 %	21 %					

Percentage of long-lived assets, other than intangibles, financial assets, and deferred tax assets, based on the location of the legal entity that owns the asset, was as follows:

	As of Decen	nber 31,
	2024	2023
Domestic	65 %	75 %
India	16 %	7 %
International, all other	19 %	18 %

20. Commitments

Future minimum payments for noncancelable operating leases, purchase obligations, and other liabilities with a remaining term in excess of one year in effect as of December 31, 2024 are payable as follows:

		Operating		gations and	Total
	L	eases		Other	Total
2025	\$	24.2	\$	181.9	\$ 206.0
2026		20.2		159.2	179.4
2027		12.6		97.0	109.6
2028		6.5		92.9	99.4
2029		2.9		84.6	87.5
Thereafter		3.5		_	3.5
Less imputed interest		(6.4)		_	(6.4)
Totals	\$	63.4	\$	615.6	\$ 679.1

Purchase obligations and other excludes trade accounts payable that are included in our balance sheet as of December 31, 2024. Purchase obligations and other include commitments for outsourcing services, royalties, data licenses, and maintenance and other operating expenses.

Licensing agreements

We have agreements with Fair Isaac Corporation to license credit-scoring algorithms and the right to sell credit scores derived from those algorithms. Payment obligations under these agreements vary due to factors such as the volume of credit scores we sell, what type of credit scores we sell, and how our customers use the credit scores. There are no minimum payments required under these licensing agreements. However, we do have a significant level of sales volume related to these credit scores.

21. Contingencies

Legal and Regulatory Matters

We are routinely named as defendants in, or parties to, various legal actions and proceedings relating to our current or past business operations. These actions generally assert claims for violations of federal or state credit reporting, consumer protection or privacy laws, or common law claims related to the unfair treatment of consumers, and may include claims for substantial or indeterminate compensatory or punitive damages, or injunctive relief, and may seek business practice changes. We believe that most of these claims are either without merit or we have valid defenses to the claims, and we vigorously defend these matters or seek non-monetary or small monetary settlements, if possible. However, due to the uncertainties inherent in litigation, we cannot predict the outcome of each claim in each instance.

In the ordinary course of business, we also are subject to governmental and regulatory examinations, information-gathering requests, investigations and proceedings (both formal and informal), certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. In connection with formal and informal investigations and inquiries by regulators, we sometimes receive civil investigative demands, requests, subpoenas and orders seeking documents, testimony, and other information in connection with various aspects of our activities.

In view of the inherent unpredictability of legal and regulatory matters, particularly where the damages sought are substantial or indeterminate or when the proceedings or investigations are in the early stages, we cannot determine with any degree of certainty the timing or ultimate resolution of legal and regulatory matters or the eventual loss, fines or penalties, if any, that may result from such matters. We establish reserves for legal and regulatory matters when those matters present loss contingencies that are both probable and can be reasonably estimated. However, for certain of the matters, we are not able to reasonably

estimate our exposure because damages or penalties have not been specified and (i) the proceedings are in early stages, (ii) there is uncertainty as to the likelihood of a class being certified or the ultimate size of the class, (iii) there is uncertainty as to the outcome of similar matters pending against our competitors, (iv) there are significant factual issues to be resolved, and/or (v) there are legal issues of a first impression being presented. The actual costs of resolving legal and regulatory matters, however, may be substantially higher than the amounts reserved for those matters, and an adverse outcome in certain of these matters could have a material adverse effect on our consolidated financial statements in particular quarterly or annual periods. We accrue amounts for certain legal and regulatory matters for which losses were considered to be probable of occurring based on our best estimate of the most likely outcome. It is reasonably possible actual losses could be significantly different from our current estimates. In addition, there are some matters for which it is reasonably possible that a loss will occur, however, we cannot estimate a range of the potential losses for these matters.

To reduce our exposure to an unexpected significant monetary award resulting from an adverse judicial decision, we maintain insurance that we believe is appropriate and adequate based on our historical experience. We regularly advise our insurance carriers of the claims, threatened or pending, against us in legal and regulatory matters and generally receive a reservation of rights letter from the carriers when such claims exceed applicable deductibles. We are not aware of any significant monetary claim that has been asserted against us, except for the active matters with the Consumer Financial Protection Bureau (the "CFPB") referenced below, that would not have some level of coverage by insurance after the relevant deductible, if any, is met.

As of December 31, 2024 and 2023, we have accrued \$123.5 million and \$147.8 million, respectively, for legal and regulatory matters. These amounts are recorded in other accrued liabilities in the Consolidated Balance Sheets and the associated expenses are recorded in selling, general and administrative expenses in the Consolidated Statements of Operations. Legal fees incurred in connection with ongoing litigation are considered period costs and are expensed as incurred.

CFPB Matters

In June 2021, we received a Notice and Opportunity to Respond and Advise ("NORA") letter from the CFPB alleging that we failed to comply with and timely implement a consent order issued by the CFPB in January 2017 (the "2017 Consent Order"), and further alleging additional violations related to Consumer Interactive's marketing practices. On September 27, 2021, the Enforcement Division advised us that it had obtained authority to pursue an enforcement action. On April 12, 2022, after failed settlement negotiations with the CFPB related to the matter, the CFPB filed a lawsuit against us, Trans Union LLC, TransUnion Interactive, Inc. (collectively, the "TU Entities") and the former President of Consumer Interactive, John Danaher, in the United States District Court for the Northern District of Illinois seeking restitution, civil money penalties, and injunctive relief, among other remedies, and alleging that the TU Entities violated the 2017 Consent Order, engaged in deceptive acts and practices in marketing the TransUnion Credit Monitoring product, failed to obtain signed written authorizations from consumers before debiting their bank accounts for the TransUnion Credit Monitoring product and diverted consumers from their free annual file disclosure into paid subscription products. The CFPB further alleges that Mr. Danaher violated the 2017 Consent Order and that he and Trans Union LLC provided substantial assistance to TransUnion Interactive, Inc. in violating the 2017 Consent Order and the law. We continue to believe that our marketing practices are lawful and appropriate and that we have been, and remain, in compliance with the 2017 Consent Order, and we will vigorously defend against allegations to the contrary in such proceedings. On February 5, 2025, the Court issued a stay in the proceedings at the CFPB's request.

As of December 31, 2024 and 2023, we have accrued \$56.0 million, in connection with this matter and there is a reasonable possibility that a loss in excess of the amount accrued may be incurred, and such an outcome could have a material adverse effect on our results of operations and financial condition. However, any possible loss or range of loss in excess of the amount accrued is not reasonably estimable at this time. In addition, we will incur increased costs litigating this matter.

In March 2024, we received a NORA letter from the CFPB, informing us that the CFPB's Enforcement Division was considering whether to recommend that the CFPB take legal action against us related to our dispute handling practices and procedures. The NORA letter alleged that Trans Union LLC violated FCRA's requirements to conduct a reasonable reinvestigation of disputed information and follow reasonable procedures to assure maximum possible accuracy of the information in consumer reports, and the Consumer Financial Protection Act's prohibition of unfair, deceptive, and abusive acts or practices. On July 12, 2024, the CFPB Enforcement Division advised us that it had obtained authority to pursue an enforcement action against us seeking specific injunctive relief provisions and civil money penalties. Since that time, we have been engaged in active discussions with the CFPB regarding this matter, including that our ability to make proposed changes to certain dispute handling processes is dependent on the participation of other consumer reporting agencies, data furnishers and industry participants. Given recent changes in CFPB leadership, our engagement with the agency on this matter has paused. We cannot provide an estimate of when, or if, such engagement will resume. We further cannot provide assurance that the CFPB will not ultimately commence a lawsuit against us in this matter, nor are we able to predict the likely outcome of this matter, which could have a material adverse effect on our results of operations and financial condition. We are not able to reasonably estimate our potential loss or range of loss related to this matter.

Argus Department of Justice Matter

We settled a matter with the civil division of the United States Attorney's Office for the Eastern District of Virginia. This matter pertained to alleged conduct, related to Argus's use of certain data it collected under certain government contracts, that commenced before our acquisition of VF, including Argus, in April 2022. Together with Verisk (the "Seller"), we finalized a \$37.0 million settlement (the "Settlement") with the Department of Justice ("DOJ"). Under the stock purchase agreement Trans Union LLC entered into with the Seller pursuant to which we acquired VF, including Argus, the Seller agreed to indemnify us for certain losses with respect to this matter, including all losses directly resulting from any settlement agreement with the DOJ in connection with this matter, including civil money penalties, remediation costs and fees and expenses. As of December 31, 2023, we had recorded an accrued liability of \$37.0 million and a related indemnification receivable for this matter. During the year ended December 31, 2024, the Settlement was paid in full to the DOJ and the indemnification receivable was collected.

22. Accumulated Other Comprehensive Income (Loss)

The following table sets forth the changes in each component of accumulated other comprehensive income (loss), net of tax:

	Foreign Currency Franslation Adjustment	let Unrealized Gain/(Loss) On Cash Flow Hedges	Av	t Unrealized Gain/(Loss) On vailable-for- sale Securities	C	Accumulated Other omprehensive
Balance, December 31, 2021	\$ (269.2)	\$ (16.6)	\$	0.4	\$	(285.4)
Other comprehensive income (loss) before reclassifications	(196.4)	197.3		(0.2)		0.7
Amounts reclassified from other comprehensive (income) loss		(2.1)				(2.1)
Other comprehensive income (loss) for the year ended December 31, 2022	\$ (196.4)	\$ 195.2	\$	(0.2)	\$	(1.4)
Other comprehensive income (loss) attributable to noncontrolling interests	2.3	_		_		2.3
Balance, December 31, 2022	\$ (463.5)	\$ 178.6	\$	0.2	\$	(284.5)
Other comprehensive income (loss) before reclassifications	79.1	 27.8				106.9
Amounts reclassified from other comprehensive (income) loss		(84.4)				(84.4)
Other comprehensive income (loss) for the year ended December 31, 2023	\$ 79.1	\$ (56.6)	\$	_	\$	22.5
Other comprehensive income (loss) attributable to noncontrolling interests	1.1	_				1.1
Balance, December 31, 2023	\$ (383.4)	\$ 122.0	\$	0.2	\$	(260.9)
Other comprehensive income (loss) before reclassifications	(69.8)	48.8		_		(21.0)
Amounts reclassified from other comprehensive (income) loss	 <u> </u>	(88.0)		<u> </u>		(88.0)
Other comprehensive income (loss) for the year ended December 31, 2024	\$ (69.8)	\$ (39.2)	\$		\$	(109.0)
Other comprehensive income (loss) attributable to noncontrolling interests	2.7	_		_		2.7
Balance, December 31, 2024	\$ (450.2)	\$ 82.8	\$	0.2	\$	(367.2)

23. Subsequent Events

On January 15, 2025, TransUnion signed a definitive agreement to acquire majority ownership in Trans Union de Mexico, S.A., S.I.C. ("Trans Union de Mexico"), the consumer credit business of the largest credit bureau in Mexico, Buró de Crédito. TransUnion currently owns 25.69% of Trans Union de Mexico and has agreed to acquire an additional 68% from selling shareholders in exchange for cash consideration of approximately MXN 11,500 million, subject to certain customary purchase price adjustments. There is no contingent consideration related to this transaction. The transaction is expected to close by the end of 2025, subject to the satisfaction of regulatory approvals and customary closing conditions. We anticipate funding this acquisition through a combination of debt and cash on hand.

Further, on January 8, 2025, TransUnion signed a definitive agreement to acquire U.K.-based Monevo in exchange for cash consideration, subject to certain customary purchase price adjustments. TransUnion currently owns 30% of the equity of Monevo and has agreed to acquire the remaining ownership position from Quint Group Limited through the exercise of a call option obtained with its initial investment in Monevo. The transaction is expected to close by the second quarter of 2025, subject to the satisfaction of regulatory approvals and customary closing conditions. We expect to fund this acquisition with cash on hand.

On February 11, 2025, our Board authorized the repurchase of up to \$500.0 million of our common stock. Repurchases may be made from time to time at management's discretion at prices management considers to be attractive through open market purchases or through privately negotiated transactions, or otherwise, including pursuant to a Rule 10b5-1 plan, hybrid open market repurchases or an accelerated share repurchase transaction, subject to availability. Open market purchases will be conducted in accordance with the limitations set forth in Rule 10b-18 of the Securities Exchange Act of 1934 and other applicable legal requirements. We have no obligation to repurchase additional shares, and the timing, actual number and value of the shares that are repurchased, if any, will be at the discretion of management and will depend on a number of factors, including market conditions, the cost of repurchasing shares, the availability of alternative investment opportunities, liquidity and other factors deemed appropriate. Repurchases may be suspended, terminated or modified at any time for any reason and the share repurchase program does not have an expiration date. Any repurchased shares will be retired and returned to the status of authorized but unissued shares of the Company. This new share repurchase authorization replaces all previous authorizations.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. The term "disclosure controls and procedures" as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms.

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2024, the end of the period covered by this report, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. TransUnion'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 U.S. generally accepted accounting principles. Internal control over financial reporting includes those policies and procedures that:

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

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

Management assessed the effectiveness of TransUnion's internal control over financial reporting as of December 31, 2024. In making this assessment, management used the criteria described in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission in ("COSO"). Based on our assessment, management concluded that, as of December 31, 2024, TransUnion's internal control over financial reporting was effective.

Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has audited the effectiveness of TransUnion's internal control over financial reporting as of December 31, 2024, as stated in their report which is included in this Annual Report on Form 10-K.

Remediation of Previously Reported Material Weaknesses

Management designed and implemented new processes and controls related to the classification of certain costs between cost of services and selling, general and administrative in the Consolidated Statements of Operations. These new controls have operated effectively as of December 31, 2024 and for a sufficient period of time during 2024 in order for management to conclude that the material weakness has been remediated as of December 31, 2024.

Management designed and implemented new processes and controls over interim goodwill impairment assessments, related to the preparation and review of the manual translation of the base year forecast information, and executed these new procedures in connection with the segment change, which required an impairment assessment before and after the segment change, that occurred during the three months ended March 31, 2024. We tested the operating effectiveness of these new controls and have concluded that they are operating effectively.

Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2024, there have been 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

On November 19, 2024, Timothy J. Martin, Executive Vice President, Chief Global Solutions Officer, adopted a Rule 10b5-1 trading arrangement that is intended to satisfy the affirmative defense of Rule 10b5-1(c) for the sale of up to 10,000 shares of the Company's common stock until June 30, 2025.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following information with respect to our Board of Directors is presented as of February 13, 2025:

Name	Position	Principal Employment
Christopher A. Cartwright	President & Chief Executive Officer, Director	President & Chief Executive Officer, TransUnion
Dr. George M. Awad	Director	Principal, Gibraltar Capital Corporation
Suzanne P. Clark	Director	President and Chief Executive Officer, U.S. Chamber of Commerce
Hamidou Dia	Director	VP, Applied AI Engineering, Google Cloud
Russell P. Fradin	Director	Operating Partner, Clayton, Dubilier & Rice
Charles E. Gottdiener	Director	Chief Executive Officer, Anaplan, Inc.
Pamela A. Joseph	Director	Chief Executive Officer and Executive Chair, Xplor Technologies, Inc.
Thomas L. Monahan, III	Director	Chief Executive Officer, Heidrick and Struggles, Inc.
Ravi Kumar Singisetti	Director	Chief Executive Officer, Cognizant Technology Solutions Corporation
Linda K. Zukauckas	Director	Chief Financial Officer, Integrity, LLC

The other information required by this item is incorporated by reference to our Proxy Statement for the 2025 Annual Meeting of Stockholders to be held on May 7, 2025, which will be filed with the SEC within 120 days of the end of our fiscal year ended December 31, 2024.

See Part I, "Information about our Executive Officers" of this Annual Report on Form 10-K for information regarding our executive officers.

Code of Business Conduct and Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all directors, officers and employees. Our Code of Business Conduct and Ethics is available in the "Investor Relations" section of our website at www.transunion.com, under the tab "Corporate Governance," and a copy of the Code of Business Conduct and Ethics may also be obtained free of charge upon a request directed to TransUnion, 555 West Adams Street, Chicago, Illinois 60661, Attn: Corporate Secretary. Our Code of Business Conduct and Ethics is a "code of ethics," as defined in Item 406(b) of Regulation S-K. We will make any legally required disclosures regarding amendments to, or waivers of, provisions of our code of ethics on our website.

Insider Trading Policy

We have adopted an Insider Trading Policy that governs the purchase, sale, and/or other dispositions of our securities by directors, officers and employees that is reasonably designed to promote compliance with insider trading laws, rules and regulations, and the listing requirements of the New York Stock Exchange. A copy of our Insider Trading Policy is filed as Exhibit 19.1 to this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to our Proxy Statement for the 2025 Annual Meeting of Stockholders to be held on May 7, 2025, which will be filed with the SEC within 120 days of the end of our fiscal year ended December 31, 2024.

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

The information required by this item is incorporated by reference to our Proxy Statement for the 2025 Annual Meeting of Stockholders to be held on May 7, 2025, which will be filed with the SEC within 120 days of the end of our fiscal year ended December 31, 2024.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference to our Proxy Statement for the 2025 Annual Meeting of Stockholders to be held on May 7, 2025, which will be filed with the SEC within 120 days of the end of our fiscal year ended December 31, 2024.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference to our Proxy Statement for the 2025 Annual Meeting of Stockholders to be held on May 7, 2025, which will be filed with the SEC within 120 days of the end of our fiscal year ended December 31, 2024.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) List of Documents Filed as a Part of This Report:

- (1) Financial Statements. The following financial statements are included in Item 8 of Part II:
 - Consolidated Balance Sheets—December 31, 2024 and 2023;
 - Consolidated Statements of Operations for the years ended December 31, 2024, 2023 and 2022;
 - Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2024, 2023 and 2022;
 - Consolidated Statements of Cash Flows for the years ended December 31, 2024, 2023 and 2022;
 - Consolidated Statements of Stockholders' Equity for the years ended December 31, 2024, 2023 and 2022; and
 - Notes to Consolidated Financial Statements.
- (2) Financial Statement Schedules.
 - Schedule I Condensed Financial Information of TransUnion as of December 31, 2024 and 2023 and for the years ended December 31, 2024, 2023 and 2022 and the accompanying notes; and
 - Schedule II—Valuation and Qualifying Accounts for the years ended December 31, 2024, 2023 and 2022.

Schedules I and II are filed as part of this Report and are set forth immediately following the signature page.

(3) The following exhibits are filed with this Annual Report on Form 10-K for the fiscal year ended December 31, 2024, or incorporated herein by reference.

Exhibit No. Exhibit Name

- 2.1†† Securities Purchase Agreement, dated as of September 11, 2021, by and between Trans Union LLC and Aerial Investors LLC (Incorporated by reference to Exhibit 2.1 to TransUnion's Current Report on Form 8-K filed on September 13, 2021).
- 2.2†† Stock Purchase Agreement, dated as of October 26, 2021, by and between Trans Union LLC and nThrive, Inc. (Incorporated by reference to Exhibit 2.2 to TransUnion's Annual Report on Form 10-K filed on February 22, 2022).
- 3.1 Third Amended and Restated Certificate of Incorporation of TransUnion (Incorporated by reference to Exhibit 3.1.2 to TransUnion's Current Report on Form 8-K filed on May 18, 2020).
- Fifth Amended and Restated Bylaws of TransUnion (Amended as of February 21, 2024) (Incorporated by reference to Exhibit 3.1 to TransUnion's Current Report on Form 8-K filed on February 27, 2024).
- 4.1 Form of Stock Certificate for Common Stock (Incorporated by reference to Exhibit 4.6 to TransUnion's Amendment No. 3 to Registration Statement on Form S-1 filed on June 15, 2015).
- Description of TransUnion's securities (Incorporated by reference to Exhibit 4.2 to TransUnion's Annual Report on Form 10-K filed on February 16, 2021).
- Amendment No. 13 to Credit Agreement, dated as of August 9, 2017, by and among TransUnion Intermediate Holdings, Inc., Trans Union LLC, the guarantors party thereto, Deutsche Bank AG New York Branch, as Administrative Agent and as Collateral Agent, Deutsche Bank AG New York Branch, as L/C Issuer, the other lenders from time to time party thereto and Deutsche Bank Securities, Inc., Capital One, N.A., Goldman Sachs Lending Partners LLC, JP Morgan Chase Bank, N.A., Merrill Lynch, Pierce, Fenner & Smith Incorporated, RBC Capital Markets and Wells Fargo Securities, LLC, as joint lead arrangers and joint bookrunners (Incorporated by reference to Exhibit 10.1 to TransUnion's Quarterly Report on Form 10-Q filed on October 27, 2017).

- Amendment No. 14 to Credit Agreement, dated as of May 2, 2018, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., Capital One, N.A., Merrill Lynch, Pierce, Fenner & Smith Incorporated and RBC Capital Markets, as joint lead arrangers, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.1 to TransUnion's Quarterly Report on Form 10-Q filed on July 25, 2018).
- Amendment No. 15 to Credit Agreement, dated as of June 19, 2018, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., RBC Capital Markets, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Capital One, N.A., as joint lead arrangers, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.2 to TransUnion's Quarterly Report on Form 10-Q filed on July 25, 2018).
- Amendment No. 16 to Credit Agreement, dated as of June 29, 2018, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., RBC Capital Markets, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Capital One, N.A., as joint lead arrangers, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.3 to TransUnion's Quarterly Report on Form 10-Q filed on July 25, 2018).
- Amendment No. 17 to Credit Agreement, dated as of November 15, 2019, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., BofA Securities, Inc., Capital One, N.A. and RBC Capital Markets, as joint lead arrangers, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.5 to TransUnion's Annual Report on Form 10-K filed on February 18, 2020).
- Amendment No. 18 to Credit Agreement, dated as of December 10, 2019, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., BofA Securities, Inc., Capital One, N.A. RBC Capital Markets, Wells Fargo Securities LLC and JP Morgan Chase Bank, N.A. as joint lead arrangers, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.6 to TransUnion's Annual Report on Form 10-K filed on February 18, 2020).
- Amendment No. 19 to Credit Agreement, dated as of December 1, 2021, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., Bank of America, N.A., Capital One, N.A., JP Morgan Chase Bank, N.A., Royal Bank of Canada as joint lead arrangers and joint bookrunners, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.7 to TransUnion's Annual Report on Form 10-K filed on February 22, 2022).
- Amendment No. 20 to the Credit Agreement, dated as of May 15, 2023 by and between Trans Union LLC and Deutsche Bank AG New York Branch, as administrative agent (Incorporated by reference to Exhibit 10.1 to TransUnion's Quarterly Report on Form 10-Q filed on July 25, 2023).
- Amendment No. 21 to the Credit Agreement, dated as of October 27, 2023, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., BofA Securities, Inc., Capital One, N.A., JPMorgan Chase Bank, N.A., Royal Bank of Canada and Wells Fargo Securities, LLC, as joint lead arrangers and joint bookrunners, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.9 to TransUnion's Annual Report on Form 10-K filed on February 28, 2024).
- Amendment No. 22 to the Credit Agreement, dated as of February 8, 2024, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., BofA Securities, Inc., Capital One, N.A., JPMorgan Chase Bank, N.A., Royal Bank of Canada and Wells Fargo Securities, LLC, as joint lead arrangers and joint bookrunners, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.1 to TransUnion's Quarterly Report on Form 10-Q filed on April 25, 2024).

- Amendment No. 23 to the Credit Agreement, dated as of June 24, 2024, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., BofA Securities, Inc., Capital One, N.A., JPMorgan Chase Bank, N.A., Royal Bank of Canada, Wells Fargo Securities, LLC, Canadian Imperial Bank of Commerce, New York Branch, Citibank, N.A., Commercial Bank of China Limited, New York Branch, Lloyds Bank PLC, PNC Bank, National Association and The Bank of Nova Scotia, as joint lead arrangers and joint bookrunners, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto (Incorporated by reference to Exhibit 10.3 to TransUnion's Quarterly Report on Form 10-Q filed on July 25, 2024).
- Amendment No. 24 to the Credit Agreement, dated as of December 12, 2024, by and among TransUnion Intermediate Holdings, Inc. (f/k/a TransUnion Corp.), Trans Union LLC, the Guarantors, Deutsche Bank Securities Inc., BofA Securities, Inc., Capital One, N.A., JPMorgan Chase Bank, N.A., Royal Bank of Canada, Wells Fargo Securities, LLC, Canadian Imperial Bank of Commerce, New York Branch, Citibank, N.A., Commercial Bank of China Limited, New York Branch, Lloyds Bank PLC, PNC Bank, National Association and The Bank of Nova Scotia, as joint lead arrangers and joint bookrunners, Deutsche Bank AG New York Branch, as administrative agent and collateral agent, and each of the other Lenders party thereto.
- TransUnion Holding Company, Inc. 2012 Management Equity Plan (Effective April 30, 2012) (Incorporated by reference to Exhibit 10.1 to TransUnion's Registration Statement on Form S-4 filed July 31, 2012).
- TransUnion Holding Company, Inc. 2012 Management Equity Plan Stock Option Agreement (Effective April 30, 2012) (Incorporated by reference to Exhibit 10.2 to TransUnion's Registration Statement on Form S-4 filed July 31, 2012).
- Amendment No. 1 to TransUnion Holding Company, Inc. 2012 Management Equity Plan Stock Option Agreement, dated as of January 1, 2016 (Incorporated by reference to Exhibit 10.7 to TransUnion's Annual Report on Form 10-K for the year ended December 31, 2015).
- Form of Director Indemnification Agreement for directors of TransUnion (Incorporated by reference to Exhibit 10.6 to TransUnion's Registration Statement on Form S-4 filed July 31, 2012).
- Employment Agreement with James M. Peck, President and Chief Executive Officer of TransUnion and TransUnion Intermediate Holdings, Inc., dated December 6, 2012 (Incorporated by reference to Exhibit 10.15 to TransUnion's and TransUnion Intermediate Holdings, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012).
- Letter Agreement between TransUnion and Reed Elsevier with respect to the employment of James M. Peck as the President and Chief Executive Officer of TransUnion and TransUnion Intermediate Holdings, Inc., dated December 6, 2012 (Incorporated by reference to Exhibit 10.16 to TransUnion's and TransUnion Intermediate Holdings, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012).
- Employment Agreement, dated as of November 13, 2018, by and between TransUnion and Christopher A. Cartwright (Incorporated by reference to Exhibit 10.1 to TransUnion's Current Report on Form 8-K filed on November 14, 2018).
- Employment Agreement, dated as of November 13, 2018, by and between TransUnion and James M. Peck (Incorporated by reference to Exhibit 10.2 to TransUnion's Current Report on Form 8-K filed on November 14, 2018).
- Retirement and Transition Agreement, dated as of April 1, 2021, by and between TransUnion and John Danaher (Incorporated by reference to Exhibit 10.1 to TransUnion's Current Report on Form 8-K filed on April 7, 2021).
- Retirement and Transition Agreement, dated as of August 12, 2021, by and between TransUnion and David Neenan (Incorporated by reference to Exhibit 10.1 to TransUnion's Current Report on Form 8-K filed on August 13, 2021).
- Employment Agreement, dated as of August 12, 2021 by and among TransUnion, Trans Union of Canada, Inc. and Todd Skinner (Incorporated by reference to Exhibit 10.2 to TransUnion's Quarterly Report on Form 10-Q filed on October 26, 2021).
- Form of TransUnion Executive Severance and Restrictive Covenant Agreement (Incorporated by reference to Exhibit 10.3 to TransUnion's Quarterly Report on Form 10-Q filed on October 26, 2021).
- Form of TransUnion Executive Severance and Restrictive Covenant Agreement, as amended (Incorporated by reference to Exhibit 10.1 to TransUnion's Quarterly Report on Form 10-Q filed on October 23, 2024).
- Second Amended and Restated TransUnion 2015 Omnibus Incentive Plan (Incorporated by reference to Exhibit 10.1 to TransUnion's Current Report on Form 8-K filed on May 7, 2024).

101.INS**

XBRL Instance Document.

101.SCH** XBRL Taxonomy Extension Schema Document.

101.CAL** XBRL Taxonomy Extension Calculation Linkbase Document.

10.27†	TransUnion 2015 Omnibus Incentive Plan Award Agreement with respect to Restricted Stock Units (U.S. Employees) (for awards granted in or after February 2022) (Incorporated by reference to Exhibit 10.22 to TransUnion's Annual Report on Form 10-K filed on February 22, 2022).
<u>10.28</u> †	TransUnion 2015 Omnibus Incentive Plan Award Agreement, as amended, with respect to Restricted Stock units (U.S. Employees) (for awards granted in or after February 2023) (Incorporated by reference to Exhibit 10.1 to TransUnion's Quarterly Report on Form 10-Q filed on April 25, 2023).
10.29†	TransUnion Amended and Restated 2015 Omnibus Incentive Plan Award Agreement, with respect to Restricted Stock Units (U.S. Employees) (for awards granted on or after February 21, 2024) (Incorporated by reference to Exhibit 10.2 to TransUnion's Quarterly Report on Form 10-Q filed on April 25, 2024).
<u>10.30</u> †	TransUnion 2015 Omnibus Incentive Plan Award Agreement with respect to Performance Share Units (U.S. Employees) (for awards granted in or after February 2022) (Incorporated by reference to Exhibit 10.23 to TransUnion's Annual Report on Form 10-K filed on February 22, 2022).
<u>10.31</u> †	TransUnion 2015 Omnibus Incentive Plan Award Agreement, as amended, with respect to Performance Share Units (U.S. Employees) (for awards granted in or after February 2023) (Incorporated by reference to Exhibit 10.2 to TransUnion's Quarterly Report on Form 10-Q filed on April 25, 2023).
<u>10.32†</u>	TransUnion Amended and Restated 2015 Omnibus Incentive Plan Award Agreement, with respect to Performance Share Units (U.S. Employees) (for awards granted on or after February 21, 2024) (Incorporated by reference to Exhibit 10.3 to TransUnion's Quarterly Report on Form 10-Q filed on April 25, 2024).
<u>10.33†</u>	TransUnion Amended and Restated 2015 Omnibus Incentive Plan Grant Notice, Applicable to Performance Share Unit Awards Granted on June 1, 2023 (Incorporated by reference to Exhibit 10.1 to TransUnion's Current Report on Form 8-K filed on May 30, 2023).
<u>10.34†</u>	TransUnion 2015 Omnibus Incentive Plan Award Agreement with respect to Restricted Stock (Outside Directors), as amended, effective November 2, 2023 (Incorporated by reference to Exhibit 10.29 to TransUnion's Annual Report on Form 10-K filed on February 28, 2024).
<u>10.35†</u>	TransUnion Amended and Restated 2015 Omnibus Incentive Plan Award Agreement with respect to Restricted Stock (Outside Directors), effective February 21, 2024 (Incorporated by reference to Exhibit 10.4 to TransUnion's Quarterly Report on Form 10-Q filed on April 25, 2024).
<u>10.36</u> †	TransUnion 2015 Employee Stock Purchase Plan, as Amended and Restated, Effective November 6, 2018 (Incorporated by reference to Exhibit 10.24 to TransUnion's Annual Report on Form 10-K for the year ended December 31, 2018).
<u>10.37†</u>	Amendment to TransUnion 2015 Employee Stock Purchase Plan, As Amended and Restated (Incorporated by reference to Exhibit 10.2 to TransUnion's Current Report on Form 8-K filed on May 7, 2024).
10.38	Consent Order Issued by the United States Consumer Financial Protection Bureau on January 3, 2017, Administrative Proceeding - File No. 2017-CFPB-0002, In the Matter of: TransUnion Interactive, Inc., Trans Union LLC and TransUnion (Incorporated by reference to Exhibit 10.25 to TransUnion's Annual Report on Form 10-K for the year ended December 31, 2016).
<u>19.1**</u>	Insider Trading Policy.
<u>21**</u>	Subsidiaries of TransUnion.
23.1**	Consent of PricewaterhouseCoopers LLP.
<u>24**</u>	Power of Attorney - TransUnion (included on the signature page of this Form 10-K).
31.1**	Certification of Principal Executive Officer for TransUnion pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2**	Certification of Principal Financial Officer for TransUnion pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32**	Certification of Chief Executive Officer and Chief Financial Officer for TransUnion pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
<u>97.1</u>	TransUnion Policy for Recovery of Erroneously Awarded Compensation. (Incorporated by reference to Exhibit 97.1 to TransUnion's Annual Report on Form 10-K for the year ended December 31, 2023).

- 101.DEF** XBRL Taxonomy Extension Definition Linkbase Document.
- 101.LAB** XBRL Taxonomy Extension Label Linkbase Document.
- 101.PRE** XBRL Taxonomy Extension Presentation Linkbase Document.
- 104** Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101).
- † Identifies management contracts and compensatory plans or arrangement.
- ** Filed or furnished herewith.
- †† Schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule or exhibit will be furnished to the SEC upon request; provided, however, that the parties may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, for any document so furnished.
 - (4) Valuation and qualifying accounts.
- (b) **Exhibits.** See Item 15(a)(3).
- (c) Financial Statement Schedules. See Item 15(a)(2).

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 13, 2025.

TransUnion

By: /s/ Todd M. Cello

Todd M. Cello

Executive Vice President, Chief Financial

Officer

POWER OF ATTORNEY

The officers and directors whose signatures appear below constitute and appoint Heather J. Russell and Rachel W. Mantz as their true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for them in their name, place and stead, in any and all capacities, to sign and file, with the Securities and Exchange Commission, this Form 10-K and any and all amendments and exhibits thereto, and all documents in connection therewith, granting unto each such attorney-infact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully and to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 13, 2025.

Signature	Title
/s/ Christopher A. Cartwright	President & Chief Executive Officer, Director
Christopher A. Cartwright	(Principal Executive Officer)
/s/ Todd M. Cello	Executive Vice President, Chief Financial Officer
Todd M. Cello	(Principal Financial Officer)
/s/ Jennifer A. Williams	Senior Vice President, Chief Accounting Officer
Jennifer A. Williams	(Principal Accounting Officer)
/s/ George M. Awad	Director
George M. Awad	
/s/ Suzanne P. Clark	Director
Suzanne P. Clark	
/s/ Hamidou Dia	Director
Hamidou Dia	
/s/ Russell P. Fradin	Director
Russell P. Fradin	
/s/ Charles E. Gottdiener	Director
Charles E. Gottdiener	
/s/ Pamela A. Joseph	Director
Pamela A. Joseph	
/s/ Thomas L. Monahan, III	Director
Thomas L. Monahan, III	
/s/ Ravi Kumar Singisetti	Director
Ravi Kumar Singisetti	
/s/ Linda K. Zukauckas	Director
Linda K. Zukauckas	

TRANSUNION Parent Company Only Balance Sheets

(in millions, except per share data)

	December 31, 2024		De	cember 31, 2023
Assets				
Current assets:				
Other current assets	\$	0.1	\$	
Total current assets		0.1		
Investment in TransUnion Intermediate Holdings, Inc.		4,846.1		4,524.6
Other assets		5.9		6.0
Total assets	\$	4,852.1	\$	4,530.6
Liabilities and stockholders' equity				
Current liabilities:				
Trade accounts payable	\$	0.1	\$	
Due to TransUnion Intermediate Holdings, Inc.		628.6		516.9
Other current liabilities		2.3		1.9
Total current liabilities		631.0		518.8
Other liabilities		4.1		3.6
Total liabilities		635.1		522.4
Stockholders' equity:				
Common stock, \$0.01 par value; 1.0 billion shares authorized at December 31, 2024 and December 31, 2023; 201.5 million and 200.0 million shares issued as of December 31, 2024 and December 31, 2023, respectively; and 194.9 million and 193.8 million shares outstanding as of December 31, 2024 and December 31, 2023, respectively		2.0		2.0
Additional paid-in capital		2,558.9		2,412.9
Treasury stock at cost; 6.6 million and 6.2 million shares at December 31, 2024 and December 31, 2023, respectively		(334.6)		(302.9)
Retained earnings		2,357.9		2,157.1
Accumulated other comprehensive loss		(367.2)		(260.9)
Total stockholders' equity		4,217.0		4,008.2
Total liabilities and stockholders' equity	\$	4,852.1	\$	4,530.6

TRANSUNION Parent Company Only Statements of Operations

(in millions)

	Years Ended December 31,				
		2024	2023		2022
Revenue	\$	_	\$ —	\$	_
Operating expenses					
Selling, general and administrative		4.0	4.4		3.5
Total operating expenses		4.0	4.4		3.5
Operating loss		(4.0)	(4.4))	(3.5)
Non-operating income and expense					
Equity income from TransUnion Intermediate Holdings, Inc.		287.5	(202.9)		269.1
Total non-operating income and expense		287.5	(202.9)		269.1
Income (loss) from continuing operations before income taxes		283.5	(207.3))	265.6
Benefit for income taxes		0.9	1.1		0.7
Net income (loss) attributable to TransUnion Holding	\$	284.4	\$ (206.2)	\$	266.3

TRANSUNION Parent Company Only

Statements of Comprehensive Income (Loss)

(in millions)

	Years Ended December 31,					1,
		2024		2023		2022
Net income (loss) attributable to TransUnion Holding	\$	284.4	\$	(206.2)	\$	266.3
Other comprehensive income (loss):						
Foreign currency translation of TransUnion Intermediate Holdings, Inc.:						
Foreign currency translation adjustment		(69.3)		82.2		(193.4)
Benefit (provision) for income taxes		2.1		(2.0)		(0.7)
Foreign currency translation, net		(67.2)		80.2		(194.1)
Hedge instruments of TransUnion Intermediate Holdings, Inc.:						
Net change on interest rate swap		(52.3)		(75.5)		260.1
Benefit (provision) for income taxes		13.1		18.9		(64.9)
Cash flow hedges, net		(39.2)		(56.6)		195.2
Available-for-sale securities of TransUnion Intermediate Holdings, Inc.:						
Net unrealized gain (loss)						(0.3)
Benefit for income taxes				<u> </u>		0.1
Available-for-sale securities, net						(0.2)
Total other comprehensive income (loss), net of tax		(106.4)		23.6		0.9
Comprehensive income (loss) attributable to TransUnion	\$	178.0	\$	(182.6)	\$	267.2

TRANSUNION Parent Company Only Statements of Cash Flows

(in millions)

	Years Ended December 31,					
	2024		2023	2022		
Cash provided by operating activities	\$ 89.5	\$	77.1	\$	91.6	
Cash used in investing activities						
Cash flows from financing activities:						
Proceeds from issuance of common stock and exercise of stock options	24.9		23.1		18.7	
Dividends to shareholders	(82.7)		(81.8)		(77.8)	
Treasury stock purchased	 (31.7)		(18.4)		(32.5)	
Cash used in financing activities	(89.5)		(77.1)		(91.6)	
Net change in cash and cash equivalents	_				_	
Cash and cash equivalents, beginning of period	 		<u> </u>		_	
Cash and cash equivalents, end of period	\$ 	\$		\$		

TRANSUNION Parent Company Only Notes to Financial Statements

Note 1. Basis of Presentation

In the TransUnion parent company only financial statements, the Company's investment in subsidiaries is stated at cost plus equity in the undistributed earnings of subsidiaries since the date of acquisition. The Company's share of net income of its subsidiaries is included in consolidated income using the equity method. The parent company only financial information should be read in conjunction with TransUnion's consolidated financial statements and accompanying notes.

Note 2. Income Tax

TransUnion entered into an intercompany tax allocation agreement with TransUnion Intermediate Holdings, Inc. in 2013, effective for all taxable periods from May 1, 2012, forward, in which they are members of the same consolidated federal or state tax groups. The agreement allocates the consolidated tax liability from those filings among the various members of the group.

Note 3. Dividends to Stockholders

For the years ended December 31, 2024, 2023 and 2022, we declared dividends of \$0.42, \$0.42 and \$0.40 per share, respectively. During 2024, 2023 and 2022, we paid dividends of \$82.7 million, \$81.8 million and \$77.8 million, respectively. Dividends declared accrue to outstanding restricted stock units and are paid to employees as dividend equivalents when the restricted stock units vest.

Schedule II—Valuation and Qualifying Accounts TRANSUNION

(in millions)	Balance at Beginning of Year		Charged to Costs and Expenses		Charged to Other Accounts		Deductions		Balance at End of Year
Allowance for deferred tax assets:									
Year Ended December 31,									
2024	\$	104.7	\$ 7.2	\$	_	\$	(18.5)	\$	93.4
2023	\$	98.9	\$ 9.4	\$	2.7	\$	(6.3)	\$	104.7
2022	\$	70.8	\$ 21.8	\$	9.7	\$	(3.4)	\$	98.9

As a result of displaying amounts in millions, rounding differences may exist in the table above.