



Fourth Quarter 2023 Earnings

Chris Cartwright, President and CEO

Todd Cello, CFO

February 13, 2024



Forward-Looking Statements



This presentation 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. Factors that could cause TransUnion's actual results to differ materially from those described in the 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 ability to effectively manage our costs; our efforts to execute our transformation plan and achieve the anticipated benefits and savings; our ability to remediate existing material weaknesses in internal control over financial reporting and maintain effective internal control over financial reporting or disclosure controls and procedures; economic and political stability in the United States and 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; geopolitical conditions and other risks associated with our international operations; risks related to our indebtedness, including our ability to make timely payments of principal and interest and our ability to satisfy covenants in the agreements governing our indebtedness; our ability to maintain our liquidity; and other one-time events and other factors that can be found in our Annual Report on Form 10-K for the year ended December 31, 2023, to be filed with the SEC in February 2024, and our Annual Report on Form 10-K for the year ended December 31, 2022, as well as our quarterly reports for the quarters ended September 30, 2023, June 30, 2023 and March 31, 2023, and any subsequent Quarterly Report on Form 10-Q or Current Report on Form 8-K, which are filed with the Securities and Exchange Commission and are available on TransUnion's website (www.transunion.com/tru) and on the Securities and Exchange Commission's website (www.sec.gov). TransUnion undertakes 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 presentation.

Non-GAAP Financial Information



This investor presentation includes certain non-GAAP measures that are more fully described in the appendices to the presentation. Exhibit 99.1, "Press release of TransUnion dated February 13, 2024, announcing results for the quarter and year ended December 31, 2023," under the heading 'Non-GAAP Financial Measures,' furnished to the Securities and Exchange Commission on February 13, 2024. 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. Reconciliations of these non-GAAP financial measures to their most directly comparable GAAP financial measures for each of the periods included in this presentation are included in the Appendices at the back of this investor presentation.



1 Fourth quarter 2023 highlights

2 2024 strategic priorities

3 Fourth quarter 2023
financial results

4 First quarter and
full-year 2024 guidance

Fourth quarter 2023 highlights



Revenue, Adjusted EBITDA and Adjusted Diluted EPS **exceeded guidance**



Organic constant currency revenue +5% with growth across all segments



11th straight quarter of double-digit International revenue growth*, led by India, Canada, Asia Pacific and Africa



Launched programs to optimize operating model and modernize technology capabilities



Prepaid \$25M in debt for total of \$250M in 2023

*Revenue growth figures referenced above are organic constant currency.

For additional information, refer to the “Non-GAAP Financial Information” section on slide 2 and the Appendix at the back of this investor presentation.

2024 Strategic Priorities

- 1 Accelerate revenue and earnings growth
- 2 Leverage Neustar's capabilities further
- 3 Execute transformation initiatives

Anticipate stable to improving market conditions in 2024



Economic growth likely to remain muted throughout year



U.S. consumers maintain strength due to high employment and real wage growth



Inflation moderating with interest rate cuts expected in 2024 and beyond



Credit standards remain tight due to deposit outflows, rising delinquencies and potential capital constraints



India growth remains strong; economic outlook similarly muted in U.K., Canada and Latin America

Expect stronger 2024 results in low growth but more stable macro environment

Revenue

+3% to +5%

- **Stable economic conditions** with steady, albeit slower lending activity
- **Potential upside** in 2nd half if interest rates cuts occur and increase lending
- **Strong sales** in 2023 add to growth; healthy pipeline into 2024
- **Insurance growth improves** within Emerging Verticals
- **International growth momentum** continues with India leading the way
- **Pricing** by TransUnion and 3rd parties



Adjusted EBITDA

+4% to +7%

- Revenue flow-through
- Cost savings from **transformation programs**
- **Acquisition synergies**
- Prudent cost management



Adjusted Diluted EPS

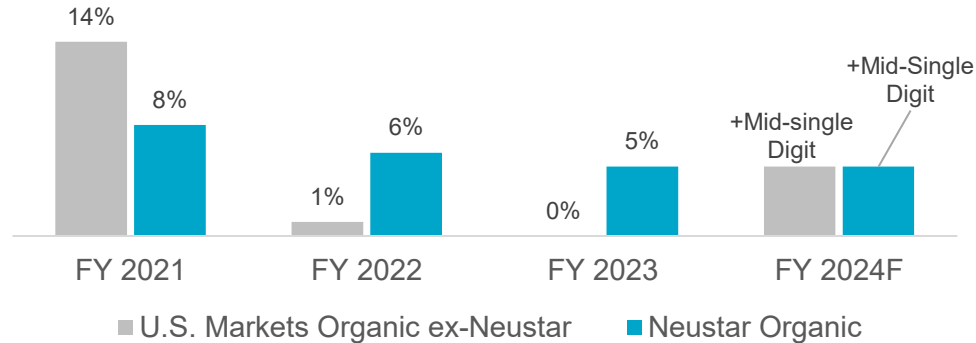
+6% to +11%

- Adjusted EBITDA flow-through
- **Lower interest expense** due to debt prepayments, refinancings and lower SOFR
- **Additional debt prepayments** not included in guidance

For additional information, refer to the “Non-GAAP Financial Information” section on slide 2 and the Appendix at the back of this investor presentation.

Neustar expected to grow mid-single digit in 2024

Organic Revenue Growth



Scale Trusted Call Solutions

- Grew revenues by ~60% in 2023 to \$80M; expect ~40% growth in 2024
- Add new capabilities in the U.S. – branded display, spoofed call blocking
- Launching soon in one of TU's largest international markets

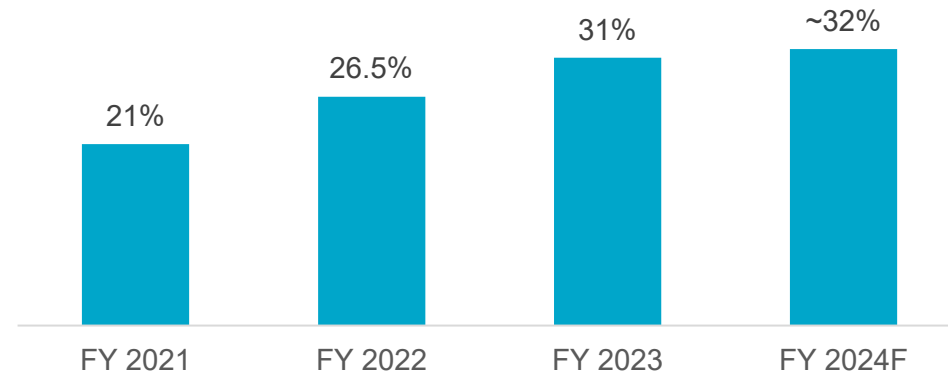
Deliver enhanced Marketing products

- Next generation Unified identity graph enhances depth, breadth and accuracy of consumer data
- Positioned to serve customers during 3rd party cookie deprecation due to strength in 1st party data

Accelerate Risk Solutions growth

- Consolidate enterprise fraud capabilities into TruValidate to deliver omni-channel fraud mitigation solutions
- Invest further in go-to-market capacity

Neustar Adjusted EBITDA Margin



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Implementing next phase of transformation to reduce costs and accelerate innovation

Programs

➤ Optimize operating model

- Expand Global Capability Center (GCC) network and drive further work centralization, standardization and automation
- ~10% of workforce impacted between position reductions and relocation to GCCs

➤ Modernize technology capabilities

- Complete cloud migration (Project Rise) and pivot to modernization
- Consolidate onto common solutions enablement platform (OneTru), leveraging Neustar's proven, data management, analytic and identity strengths
- Rationalize foundational infrastructure



Expected Benefits

➤ ~ \$200M free cash flow benefit by 2026

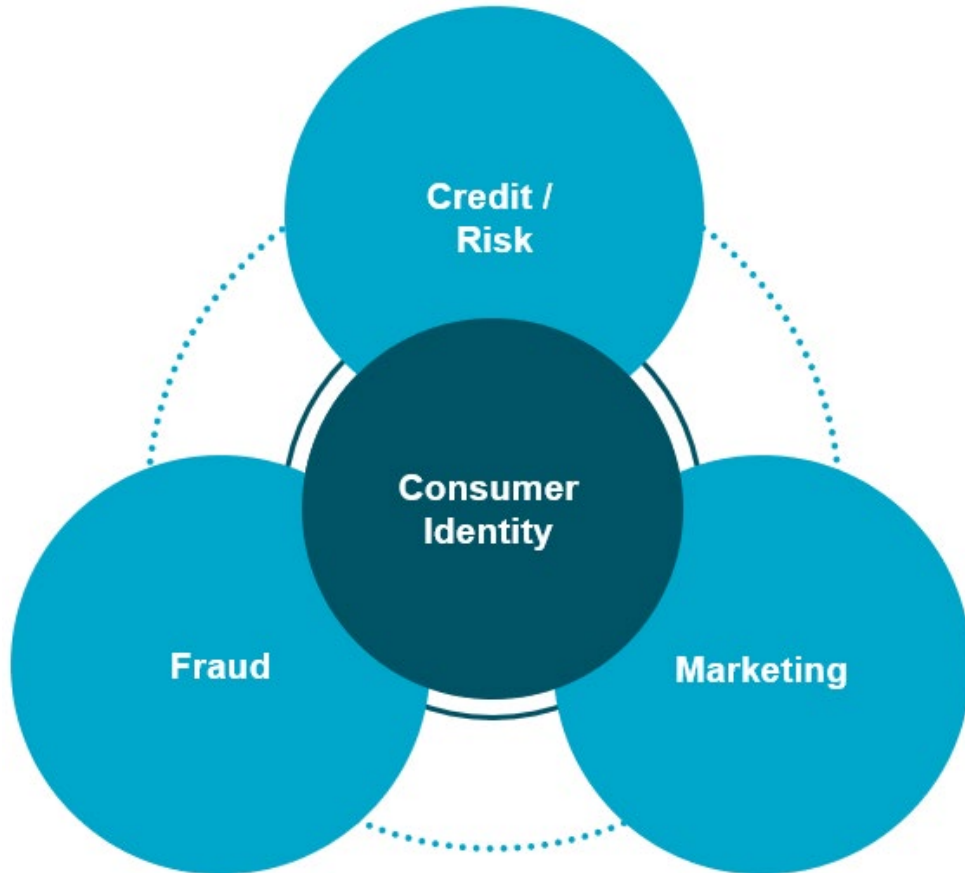
- \$120-140M of operating expense savings; half realized in 2024
- Capex ~9% of revenues in 2024, falling to 6% by 2026 or \$70-80M* reduction
- \$355-375M expected one-time expenses to capture benefits, including \$65M already budgeted for Project Rise
- \$78M one-time expenses in Q4 2023; additional ~\$200M invested in 2024

➤ Faster innovation at lower cost

- Platforms for solutions enablement and infrastructure shorten product development times across seven global product families

*Based on capex reduction from 8% of revenues to 6% on 2023 revenue base

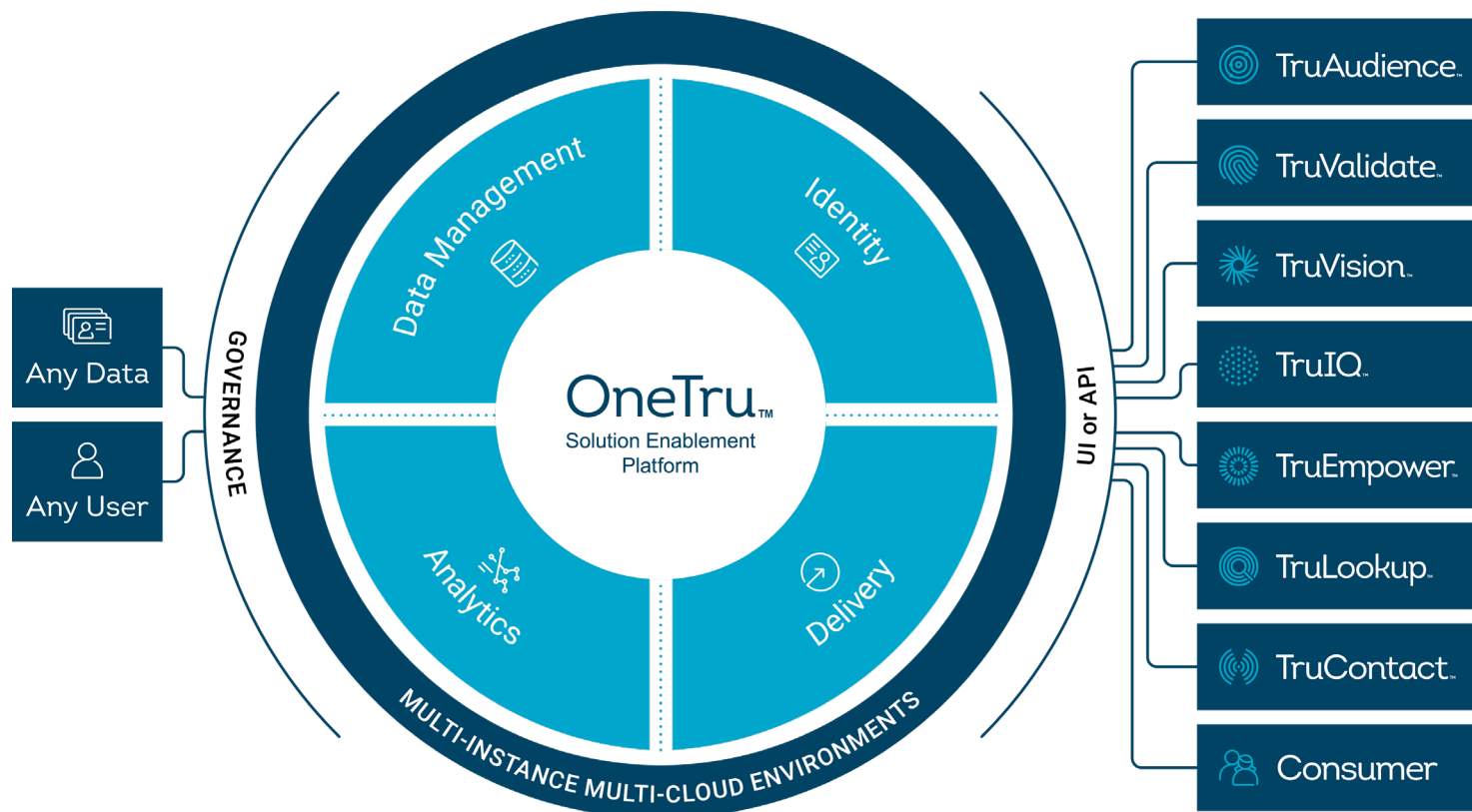
Integrating credit, fraud and marketing strengths will fuel growth across all three markets



Why we're focused here:

- ✓ Large, growing markets with attractive economics
- ✓ Complement and enhance our leading core credit position
- ✓ Clear right to win and lead through differentiated offerings and service
- ✓ Feedback loop from solutions increases ability resolve consumer ID
- ✓ Positions business model for digital era

OneTru integrates and activates data and analytic assets to power innovation and efficiency



- **Improve** data quality, innovation and time to market
- **Drive operational efficiency**
 - Rationalize applications and infrastructure
 - Standardize global services and capabilities
 - Increase engineering capacity for innovation
- **Ensure compliance-first** approach using embedded governance and security guardrails

OneTru already powers next generation of global products



TruQ (Analytics)

- **Innovation Labs** – Improve customer collaboration and enable seamless conversion into ongoing revenue
- **Data Enrichment** – Instant access to TU credit and marketing data from within customer environments
- **Advanced Acquisition** – Combine credit, audience and media mix planning capabilities into pre-screen marketing solution



TruValidate (Fraud)

- Combine TransUnion and Neustar identity data and advanced analytics (ML/AI)
- Lift match rates, reduce false positives and increase fraud detection
- Beta tests in progress with full rollout in the summer



TruAudience (Marketing)

- Launched next generation of **integrated identity graph**
- Enhance **data collaboration** (clean room) capabilities to enable privacy-safe data sharing
- Scale partnerships with leading cloud providers

Consolidated fourth quarter 2023 highlights

	Reported (\$M)	Y/Y Change
Revenue	\$954	6%
Organic Constant Currency Revenue		5%
Adjusted EBITDA	\$326	1%
Adjusted EBITDA Margin	34.2%	(140)bps
Adjusted Diluted EPS	\$0.80	2%

- Organic constant currency revenue growth of **+5%**, or **+4%** excluding mortgage

For additional information, refer to the “Non-GAAP Financial Information” section on slide 2 and the Appendix at the back of this investor presentation.

U.S. Markets fourth quarter 2023 highlights

	Reported (\$M)	Reported Y/Y	FX Impact	Inorganic Impact	Organic Constant Currency
Revenue	\$608	3%	–	–	3%
Financial Services	305	3%	–	–	3%
Emerging Verticals	302	2%	–	–	2%
Adjusted EBITDA	\$202	0%	–	–	0%

- U.S. Markets organic revenue growth (ex-mortgage) **flat**
- U.S. Financial Services organic revenue (ex-mortgage) **-2%**
 - Auto **+1%**
 - Card **-5%** and Consumer Lending **-3%** due to slower lending activity
 - Mortgage **+34%** with pricing offsetting lower inquiry volumes (down -11%)
- Emerging Verticals growth led by Insurance, Public Sector and Services & Collections

Note: Rows may not foot due to rounding. For additional information, refer to the “Non-GAAP Financial Information” section on slide 2 and the Appendix at the back of this investor presentation.

Consumer Interactive fourth quarter 2023 highlights

	Reported (\$M)	Reported Y/Y	FX Impact	Inorganic Impact	Organic Constant Currency
Revenue	\$150	7%	—	—	7%
Adjusted EBITDA	\$68	(6)%	—	—	(5)%

- Declined -2% excluding large breach win
- Indirect growth led by Sontiq (Sontiq grew 20%+ in 2023)
- Direct channel declined as expected
- Adjusted EBITDA margin of 45.5%, down (580)bps YoY, due to impact of breach win

Note: Rows may not foot due to rounding. For additional information, refer to the “Non-GAAP Financial Information” section on slide 2 and the Appendix at the back of this investor presentation.

International fourth quarter 2023 highlights

	Reported (\$M)	Reported Y/Y	FX Impact	Inorganic Impact	Organic Constant Currency
Revenue	\$215	14%	(2)%	—	13%
Canada	36	14%	0%	—	14%
Latin America	31	13%	(8)%	—	5%
U.K.	51	6%	(6)%	—	0%
Africa	16	3%	8%	—	11%
India	57	28%	2%	—	30%
Asia Pacific	23	14%	(1)%	—	13%
Adjusted EBITDA	\$95	15%	(2)%	—	13%

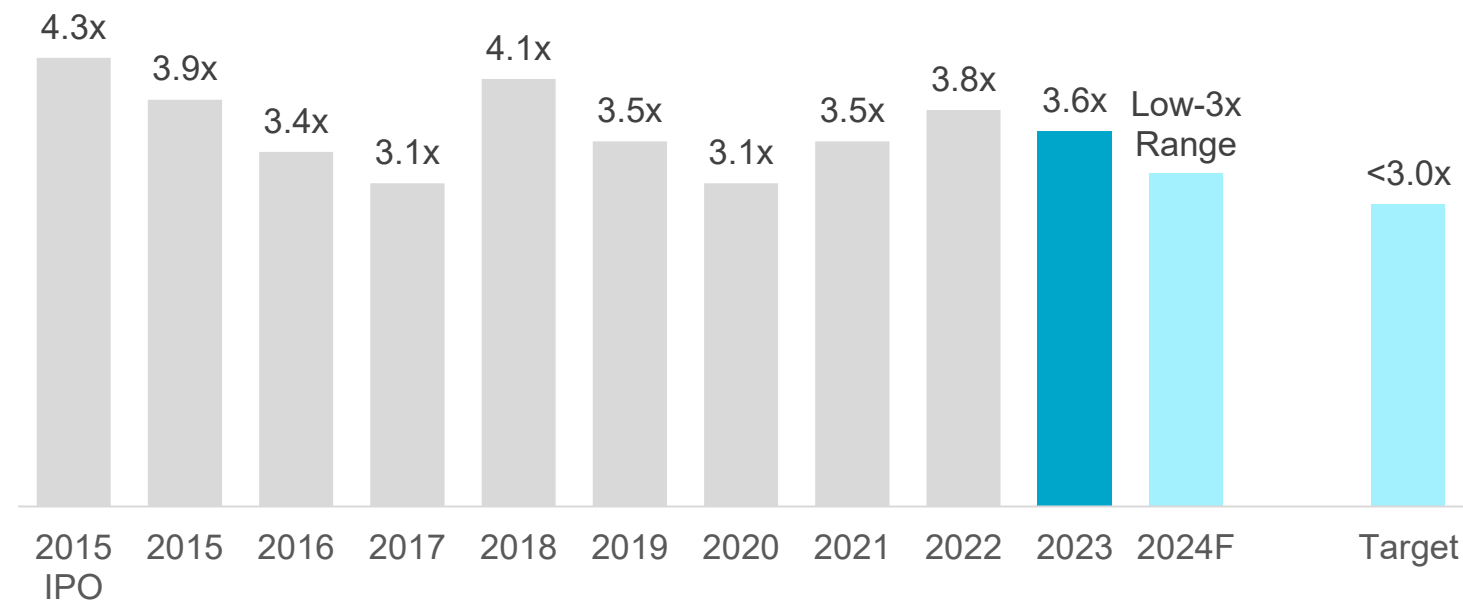
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- India (+30%) driven by consumer, commercial, marketing, fraud and direct-to-consumer
- Canada (+14%) new business wins and share gains to outperform soft lending market
- U.K. (flat) with strong Financial Services offset by softer FinTech

*Revenue growth figures referenced above are organic constant currency.

Excess cash targeted for debt prepayment

Leverage Ratio¹



Note: For additional information, refer to the “Non-GAAP Financial Information” section on slide 2 and the Appendix at the back of this investor presentation.

¹We define 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. Total debt is netted for deferred financing fees / original issue discount.

- Roughly \$5.3 billion of debt and \$480 million cash at year-end
- \$250M of debt prepayment in 2023
- ~\$8M of annual interest expense savings from refinancings completed in October and February
- Plan to make further prepayments in 2024

First quarter 2024 guidance

Reported Revenue: \$971M to \$980M	+3% to +4%
<i>Assumed M&A contribution:</i>	<i>No impact</i>
<i>Assumed FX contribution:</i>	<i>Insignificant</i>
Organic Constant Currency Revenue:	<u>+3% to +4%</u>
<i>Assumed mortgage impact:</i>	<i>~1pt. benefit</i>
Organic CC Revenue ex. mortgage:	<u>+2% to +3%</u>
Adjusted EBITDA: \$324M to \$331M	+1% to +3%
<i>Assumed FX contribution:</i>	<i>Insignificant</i>
<i>Adjusted EBITDA margin:</i>	<i>33.4% to 33.8%</i>
<i>Adjusted EBITDA margin bps change:</i>	<i>(90)bps to (50)bps</i>
Adjusted Diluted EPS: \$0.79 to \$0.81	(2%) to +1%

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Revenue

Assumes similar lending and marketing trends to Q4 2023



Adjusted EBITDA

Down from Q4 due to timing of investments in International and Consumer Interactive; expected to be lowest margin quarter in 2024

Full-year 2024 revenue guidance

Reported Revenue: \$3.960B to \$4.020B	+3% to +5%
<i>Assumed M&A contribution:</i>	<i>No impact</i>
<i>Assumed FX contribution:</i>	<i>Insignificant</i>
Organic Constant Currency Revenue:	<u>+3% to +5%</u>
<i>Assumed mortgage impact:</i>	<i>~1.5pt. benefit</i>
Organic CC Revenue ex. mortgage:	<u>+1.5% to +3.5%</u>

Organic Growth Assumptions

- **U.S. Markets** up mid-single digit (up low-single digit excluding mortgage)
 - **Financial Services** up mid-single digit (up low-single digit excluding mortgage)
 - **Emerging Verticals** up low-single digit
- **International** up high-single digit (constant-currency)
- **Consumer Interactive** down low-single digit

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Market Assumptions

- **Assumes slower conditions persist**; upside if interest rate cuts occur and drive increased lending and marketing activity
- **U.S. mortgage**: Expect ~25% revenue growth based on ~5% inquiry decline
 - Expect inquiries to decline ~15% in H1 and grow ~10% in H2 as comparisons ease
 - *U.S. mortgage was ~7% of LTM revenues*

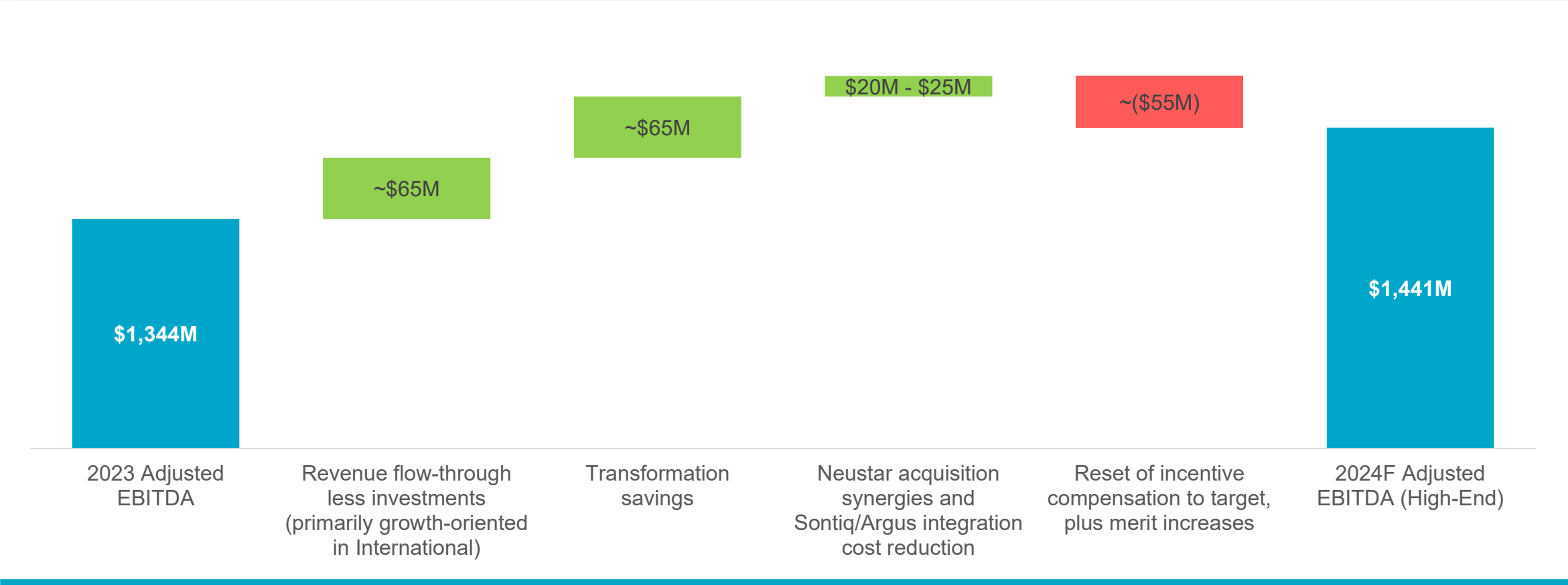
Full-year 2024 Adjusted EBITDA, Adjusted Diluted EPS and other guidance

Adjusted EBITDA: \$1.398B to \$1.441B	+4% to +7%
<i>Assumed FX contribution:</i>	<i>Insignificant</i>
<i>Adjusted EBITDA margin:</i>	<i>35.3% to 35.8%</i>
<i>Adjusted EBITDA margin bps change:</i>	<i>25bps to 75bps</i>
Adjusted Diluted EPS: \$3.57 to \$3.74	+6% to +11%
Adjusted Tax Rate: <u>~22.5%</u>	
Total D&A: <u>~\$530M</u>	
D&A ex. step-up from 2012 change in control and subsequent acquisitions: <u>~\$245M</u>	
Net Interest Expense: <u>~\$245M</u>	
CapEx: <u>~9% of revenue</u>	

- Expected one-time costs related to transformation program to total ~\$200M in 2024
- Anticipate using excess cash for debt prepayment; however, guidance assumes no further debt prepayment
 - Every \$100M of prepayment yields annualized interest savings of ~\$7M (\$0.03 EPS)

The adjusted tax rate guidance of ~22.5% reflects expected full year GAAP effective rate of ~23.9% plus the elimination of discrete adjustments and other items totaling ~1.4%.
For additional information, refer to the “Non-GAAP Financial Information” section on slide 2 and the Appendix at the back of this investor presentation.

Bridge to 2024 Adjusted EBITDA guidance



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Exceeded Q4 guidance
for revenue, Adjusted
EBITDA and Adjusted
Diluted EPS



Expecting in 2024 to
deliver +3% to +5%
organic constant
currency revenue
growth and +6% to
+11% Adjusted Diluted
EPS growth



2024 priorities:
accelerating growth,
leverage Neustar
capabilities further and
executing transformation
initiatives

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Q&A



Appendices and Non-GAAP Reconciliations



Debt Profile and 2024F Interest Expense Bridge

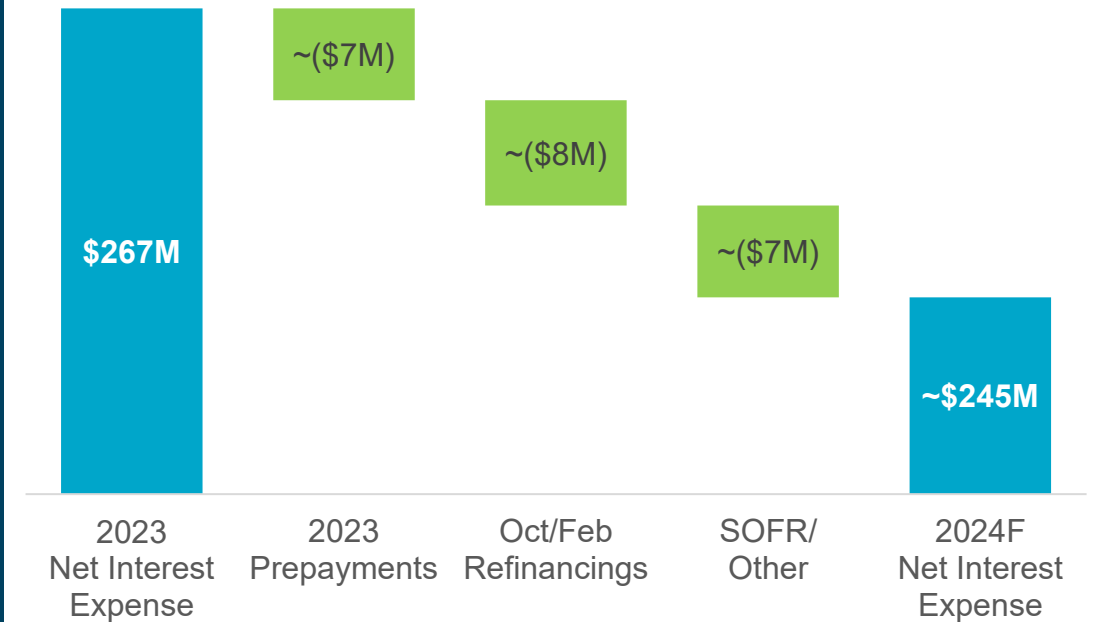
Debt Profile (12/31/23)

	Notional (\$B)	Expiry	Rate
Term Loan Tranche			
Term Loan A-3	1.3	Oct'28	SOFR + CSA + 1.50%
Term Loan B-5	2.2	Nov'26	SOFR + CSA + 1.75%
Term Loan B-6	1.9	Dec'28	SOFR + 2.00%*
Swaps*			
June 2020	1.1	Jun'25	Receive SOFR, Pay 0.87%
December 2021	1.6	Dec'26	Receive SOFR, Pay 1.39%
December 2022	1.3	Dec'24	Receive SOFR, Pay 4.36%

- ~73% of debt is currently swapped to fixed rate

*Rate for Term Loan B-6 is pro-forma for refinancing transaction completed in February.

2024F Interest Expense Bridge



- 2024 net interest expense guidance assumes no additional debt prepayment or incremental debt

Adjusted EBITDA and Adjusted EBITDA Margin

\$ in millions	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022
Reconciliation of net income (loss) attributable to TransUnion to consolidated Adjusted EBITDA:				
Net income (loss) attributable to TransUnion ⁹	\$ 6.1	\$ 46.4	\$ (206.2)	\$ 266.3
Discontinued operations, net of tax	(0.0)	(15.0)	0.7	(17.4)
Income (loss) from continuing operations attributable to TransUnion ⁹	\$ 6.0	\$ 31.4	\$ (205.4)	\$ 248.9
Net interest expense	65.4	65.9	267.5	226.2
(Benefit) provision for income taxes ⁹	(15.4)	35.8	44.7	118.9
Depreciation and amortization	133.3	130.1	524.4	519.0
EBITDA ⁹	\$ 189.4	\$ 263.1	\$ 631.2	\$ 1,113.1
Adjustments to EBITDA:				
Goodwill impairment	\$ -	\$ -	\$ 414.0	\$ -
Stock-based compensation	27.3	20.3	100.6	81.1
Operating model optimization program ¹	77.6	-	77.6	-
Accelerated technology investment ^{2,9}	17.0	19.2	70.6	54.0
Mergers and acquisitions, divestitures and business optimization ³	10.1	14.3	34.6	50.7
Net other ⁴	4.6	4.4	15.2	46.1
Total adjustments to EBITDA ⁹	\$ 136.6	\$ 58.2	\$ 712.5	\$ 231.9
Consolidated Adjusted EBITDA ⁹	\$ 326.0	\$ 321.3	\$ 1,343.7	\$ 1,344.9
Net income (loss) attributable to TransUnion margin ⁹	0.6 %	5.1 %	(5.4)%	7.2 %
Consolidated Adjusted EBITDA margin ^{5,9}	34.2 %	35.6 %	35.1 %	36.3 %

Adjusted Net Income and Adjusted Diluted EPS

\$ in millions, except per share data	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022
Reconciliation of net income (loss) attributable to TransUnion to Adjusted Net Income:				
Net income (loss) attributable to TransUnion ⁹	\$ 6.1	\$ 46.4	\$ (206.2)	\$ 266.3
Discontinued operations, net of tax	(0.0)	(15.0)	0.7	(17.4)
Income (loss) from continuing operations attributable to TransUnion ⁹	\$ 6.0	\$ 31.4	\$ (205.4)	\$ 248.9
Adjustments before income tax items:				
Goodwill impairment	-	-	414.0	-
Amortization of certain intangible assets	72.4	75.6	293.6	306.7
Stock-based compensation	27.3	20.3	100.6	81.1
Operating model optimization program ¹	77.6	-	77.6	-
Accelerated technology investment ^{2,9}	17.0	19.2	70.6	54.0
Mergers and acquisitions, divestitures and business optimization ³	10.1	14.3	34.6	50.7
Net other ⁴	4.4	3.8	14.0	44.3
Total adjustments before income tax items ⁷	\$ 208.8	\$ 133.2	\$ 1,005.0	\$ 536.8
Total adjustments for income taxes ⁹	(58.9)	(13.1)	(144.1)	(86.8)
Adjusted Net Income⁹	\$ 156.0	\$ 151.6	\$ 655.4	\$ 698.9
Weighted-average shares outstanding:				
Basic	193.7	192.7	193.4	192.5
Diluted ⁸	194.3	193.1	194.7	193.1
Adjusted Earnings per Share:⁹				
Basic	\$ 0.81	\$ 0.79	\$ 3.39	\$ 3.63
Diluted	\$ 0.80	\$ 0.78	\$ 3.37	\$ 3.62

\$ in millions, except per share data	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022
Reconciliation of diluted earnings (loss) per share from net income attributable to TransUnion to Adjusted Diluted Earnings per Share:				
Diluted earnings (loss) per common share ⁷ from:				
Net income (loss) attributable to TransUnion ⁹	\$ 0.03	\$ 0.24	\$ (1.07)	\$ 1.38
Discontinued operations, net of tax	-	(0.08)	-	(0.09)
Income (loss) from continuing operations attributable to TransUnion ⁹	\$ 0.03	\$ 0.16	\$ (1.06)	\$ 1.29
Adjustments before income tax items:				
Goodwill impairment	-	-	2.13	-
Amortization of certain intangible assets	0.37	0.39	1.51	1.59
Stock-based compensation	0.14	0.11	0.52	0.42
Operating model optimization program ¹	0.40	-	0.40	-
Accelerated technology investment ^{2,9}	0.09	0.10	0.36	0.28
Mergers and acquisitions, divestitures and business optimization ³	0.05	0.07	0.18	0.26
Net other ⁴	0.02	0.02	0.07	0.23
Total adjustments before income tax items ⁹	\$ 1.07	\$ 0.69	\$ 5.16	\$ 2.78
Total adjustments for income taxes ⁹	(0.30)	(0.07)	(0.74)	(0.45)
Impact of additional dilutive shares ⁷	\$ -	\$ -	\$ 0.02	\$ -
Adjusted Diluted Earnings per Share⁹	\$ 0.80	\$ 0.78	\$ 3.37	\$ 3.62



Adjusted Effective Tax Rate

\$ in millions	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022
(Loss) income from continuing operations before income taxes ⁹	\$ (5.8)	\$ 71.2	\$ (145.3)	\$ 383.0
Total adjustments before income tax items from Adjusted Net Income table above ⁹	208.8	133.2	1,005.0	536.8
Adjusted income from continuing operations before income taxes ⁹	\$ 203.0	\$ 204.4	\$ 859.7	\$ 919.8
Reconciliation of benefit (provision) for income taxes to Adjusted Provision for Income Taxes				
Benefit (provision) for income taxes ⁹	15.4	(35.8)	(44.7)	(118.9)
Adjustment for income taxes:				
Tax effect of above adjustments ⁹	(45.5)	(34.1)	(135.6)	(117.4)
Eliminate impact of excess tax expenses/(benefits) for stock-based compensation	0.2	0.6	3.0	(5.0)
Other ⁸	(13.7)	20.4	(11.5)	35.6
Total adjustments for income taxes ⁹	\$ (58.9)	\$ (13.1)	\$ (144.1)	\$ (86.8)
Adjusted Provision for Income Taxes⁹	\$ (43.5)	\$ (48.9)	\$ (188.8)	\$ (205.7)
Effective tax rate ⁹	263.1 %	50.3 %	(30.8)%	31.0 %
Adjusted Effective Tax Rate⁹	21.4 %	23.9 %	22.0 %	22.4 %

Leverage Ratio

\$ in millions	Twelve Months Ended December 31,	
	2023	2022
Reconciliation of net loss (income) attributable to TransUnion to Consolidated Adjusted EBITDA:		
Net loss (income) attributable to TransUnion ⁹	\$ (206.2)	\$ 266.3
Discontinued operations, net of tax	0.7	(17.4)
Loss from continuing operations attributable to TransUnion ⁹	\$ (205.4)	\$ 248.9
Net interest expense	267.5	226.2
Provision for income taxes ⁹	44.7	118.9
Depreciation and amortization	524.4	519.0
EBITDA⁹	\$ 631.2	\$ 1,113.1
Adjustments to EBITDA:		
Goodwill impairment	\$ 414.0	\$ -
Stock-based compensation	100.6	81.1
Operating model optimization program ¹	77.6	-
Accelerated technology investment ^{2,9}	70.6	54.0
Mergers and acquisitions, divestitures and business optimization ³	34.6	50.7
Net other ⁴	15.2	46.1
Total adjustments to EBITDA⁹	\$ 712.5	\$ 231.9
Consolidated Adjusted EBITDA ⁹	1,343.7	1,344.9
Adjusted EBITDA for Pre-Acquisition Period	-	6.4
Leverage Ratio Adjusted EBITDA⁹	\$ 1,343.7	\$ 1,351.3
Total debt	\$ 5,340.4	\$ 5,760.1
Less: Cash and cash equivalents	479.9	585.3
Net Debt	\$ 4,860.5	\$ 5,084.8
Ratio of Net Debt to Net loss attributable to TransUnion ⁹	(23.6)	19.1
Leverage Ratio⁹	3.6	3.8

Non-GAAP Adjustment Footnotes

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

1. Consists of restructuring expenses of \$71.9 million related to employee separation costs and \$3.4 million related to non-cash facility lease impairments, as well as \$2.3 million related to business process optimization expenses included primarily in selling, general and administrative expenses
2. 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:

\$ in millions	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022
Foundational Capabilities	\$ 8.0	\$ 11.6	\$ 35.8	\$ 34.1
Migration Management	7.7	6.2	29.6	14.6
Program Enablement	1.3	1.4	5.2	5.3
Total accelerated technology investment	\$ 17.0	\$ 19.2	\$ 70.6	\$ 54.0

3. Mergers and acquisitions, divestitures and business optimization consisted of the following adjustments:

\$ in millions	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022
Transaction and integration costs	\$ 9.9	\$ 10.1	\$ 30.9	\$ 56.9
Post-acquisition adjustments	(0.5)	-	4.3	(3.4)
Fair value and impairment adjustments	0.9	5.0	1.6	4.0
Transition services agreement income	(0.1)	(0.8)	(2.5)	(6.8)
Loss on disposal	-	-	0.3	-
Total mergers and acquisitions, divestitures and business optimization	\$ 10.1	\$ 14.3	\$ 34.6	\$ 50.7

4. Net other consisted of the following adjustments:

\$ in millions	Adjusted EBITDA & Leverage Ratio				Adjusted Net Income			
	Three Months Ended December 31,		Twelve Months Ended December 31,		Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022	2023	2022	2023	2022
Deferred loan fee expense from debt prepayments and refinancing	\$ 6.2	\$ 2.8	\$ 9.3	\$ 9.3	\$ 6.2	\$ 2.8	\$ 9.3	\$ 9.3
Currency remeasurement on foreign operations	(1.8)	1.0	4.8	6.3	(1.8)	1.0	4.8	6.3
Other debt financing expenses	0.7	0.4	2.2	1.7	-	-	-	-
Legal and regulatory expenses, net	-	-	-	28.4	-	-	-	28.4
Other non-operating (income) and expense	(0.5)	0.1	(1.0)	0.3	-	-	-	0.3
Total other adjustments	\$ 4.6	\$ 4.4	\$ 15.2	\$ 46.1	\$ 4.4	\$ 3.8	\$ 14.0	\$ 44.3

Non-GAAP Adjustment Footnotes

5. Consolidated Adjusted EBITDA margin is calculated by dividing Consolidated Adjusted EBITDA by total revenue.
6. Diluted share counts for Adjusted Diluted Earnings Per Share includes an additional \$1.3 million of dilutive securities for the twelve months ended December 31, 2023 which are not included in GAAP diluted weighted-average shares outstanding due to the Company's net loss position in this period.
7. Each component of earnings per share is calculated independently, therefore, rounding differences exist in the table above.
8. Other adjustments for income taxes include:

\$ in millions	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022
Deferred tax adjustments	\$ (13.5)	\$ 4.7	\$ (12.9)	\$ 6.7
Valuation allowance adjustments	4.8	18.4	4.0	25.7
Return to provision, audit adjustments, and reserves related to prior periods	(3.6)	(3.2)	(1.0)	(0.3)
Other adjustments	(1.4)	0.5	(1.6)	3.5
Total other adjustments	\$ (13.7)	\$ 20.4	\$ (11.5)	\$ 35.6

9. Our results for the twelve months ended December 31, 2022 have been adjusted to correct an immaterial error related to an over accrual of expenses, net of the related income tax effect, during the twelve months ended December 31, 2021, that had previously been corrected out of period during the twelve months ended December 31, 2022. A portion of this error impacted our accelerated technology investment adjustment and the income tax effect of this adjustment.

Adjusted EBITDA and Adjusted EPS Guidance

\$ in millions, except per share data	Three Months Ended March 31, 2024		Twelve Months Ended December 31, 2024	
	Low	High	Low	High
Guidance reconciliation of net income attributable to TransUnion to Adjusted EBITDA:				
Net income attributable to TransUnion	\$ 22	\$ 27	\$ 211	\$ 244
Interest, taxes and depreciation and amortization	204	206	848	859
EBITDA	\$ 226	\$ 233	\$ 1,059	\$ 1,102
Stock-based compensation, mergers, acquisitions, divestitures and business optimization, operating model optimization program, accelerated technology investment, and net other adjustments ¹	98	98	339	339
Adjusted EBITDA	\$ 324	\$ 331	\$ 1,398	\$ 1,441
Net income attributable to TransUnion margin	2.3 %	2.7 %	5.3 %	6.1 %
Consolidated Adjusted EBITDA margin ²	33.4 %	33.8 %	35.3 %	35.8 %
Guidance reconciliation of diluted earnings per share to Adjusted Diluted Earnings per Share:				
Diluted earnings per share	\$ 0.11	\$ 0.14	\$ 1.08	\$ 1.24
Adjustments to diluted earnings per share ¹	0.68	0.68	2.49	2.49
Adjusted Diluted Earnings per Share	\$ 0.79	\$ 0.81	\$ 3.57	\$ 3.74

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

1. These adjustments include the same adjustments we make to our Adjusted EBITDA and Adjusted Net Income as discussed in the Non-GAAP Financial Measures section of our Earnings Release.
2. Consolidated Adjusted EBITDA margin is calculated by dividing Consolidated Adjusted EBITDA by total revenue.