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

FORM 10-Q

(Mark One) ☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OF For the quarterly peri	R 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 od ended June 30, 2023
	OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OF	(15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from	to
Commission F	ile Number 1-6075
	CORPORATION t as specified in its charter)
Utah (State or other jurisdiction of incorporation or organization)	13-2626465 (I.R.S. Employer Identification No.)
1400 Douglas Street, Omaha, Nebraska (Address of principal executive offices)	68179 (Zip Code)
, ,	544-5000 umber, including area code)
Securities registered pursuant to Section 12(b) of the Act: <u>Title of each Class</u> <u>Trading Sym</u> Common Stock (Par Value \$2.50 per share) UNP	<u>Name of each exchange on which registered</u> New York Stock Exchange
	eports required to be filed by Section 13 or 15(d) of the Securities such shorter period that the registrant was required to file such or the past 90 days.
	⊠ Yes □ No
	electronically every Interactive Data File required to be submitted er) during the preceding 12 months (or for such shorter period that
	⊠ Yes □ No
	erated filer, an accelerated filer, a non-accelerated filer, a smaller definitions of "large accelerated filer," "accelerated filer," "smaller Pb-2 of the Exchange Act.
Large Accelerated Filer ☑ Accelerated File Smaller Reporting Company □ Emerging Growt	r □ Non-Accelerated Filer □
If an emerging growth company, indicate by check mark if the complying with any new or revised financial accounting standar	• • • • • • • • • • • • • • • • • • • •
Indicate by check mark whether the registrant is a shell compa	
As of July 21, 2023, there were 609,456,215 shares of the Reg	□ Yes □ No istrant's Common Stock outstanding.

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PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

Condensed Consolidated Statements of Income (Unaudited)

Union Pacific Corporation and Subsidiary Companies

Millions, Except Per Share Amounts, for the Three Months Ended June 30,	2023	2022
Operating revenues:		
Freight revenues	\$ 5,569	\$ 5,842
Other revenues	394	427
Total operating revenues	5,963	6,269
Operating expenses:		
Compensation and benefits	1,269	1,092
Fuel	664	940
Purchased services and materials	650	622
Depreciation	577	559
Equipment and other rents	248	230
Other	351	331
Total operating expenses	3,759	3,774
Operating income	2,204	2,495
Other income, net (Note 5)	93	163
Interest expense	(339)	(316)
Income before income taxes	1,958	2,342
Income tax expense (Note 6)	(389)	(507)
Net income	\$ 1,569	\$ 1,835
Share and Per Share (Note 7):		
Earnings per share - basic	\$ 2.58	\$ 2.93
Earnings per share - diluted	\$ 2.57	\$ 2.93
Weighted average number of shares - basic	608.7	625.6
Weighted average number of shares - diluted	609.5	626.8

Condensed Consolidated Statements of Comprehensive Income (Unaudited)

Union Pacific Corporation and Subsidiary Companies

Millions, for the Three Months Ended June 30,	2023	2022
Net income	\$ 1,569	\$ 1,835
Other comprehensive income/(loss):		
Defined benefit plans	6	14
Foreign currency translation	21	23
Unrealized gain on derivative instruments	16	-
Total other comprehensive income/(loss) [a]	43	37
Comprehensive income	\$ 1,612	\$ 1,872

[[]a] Net of deferred taxes of (\$3) million and (\$6) million during the three months ended June 30, 2023 and 2022, respectively.

Condensed Consolidated Statements of Income (Unaudited)

Union Pacific Corporation and Subsidiary Companies

Millions, Except Per Share Amounts, for the Six Months Ended June 30,	2023	2022
Operating revenues:		
Freight revenues	\$ 11,225	\$ 11,282
Other revenues	794	847
Total operating revenues	12,019	12,129
Operating expenses:		
Compensation and benefits	2,448	2,193
Fuel	1,430	1,654
Purchased services and materials	1,303	1,183
Depreciation	1,149	1,114
Equipment and other rents	483	445
Other	708	668
Total operating expenses	7,521	7,257
Operating income	4,498	4,872
Other income, net (Note 5)	277	210
Interest expense	(675)	(623)
Income before income taxes	4,100	4,459
Income tax expense (Note 6)	(901)	(994)
Net income	\$ 3,199	\$ 3,465
Share and Per Share (Note 7):		
Earnings per share - basic	\$ 5.25	\$ 5.51
Earnings per share - diluted	\$ 5.24	\$ 5.50
Weighted average number of shares - basic	609.6	628.9
Weighted average number of shares - diluted	610.5	630.2

Condensed Consolidated Statements of Comprehensive Income (Unaudited)

Union Pacific Corporation and Subsidiary Companies

Millions, for the Six Months Ended June 30,	2023	2022
Net income	\$ 3,199	\$ 3,465
Other comprehensive income/(loss):		
Defined benefit plans	5	29
Foreign currency translation	44	44
Unrealized gain on derivative instruments	16	-
Total other comprehensive income/(loss) [a]	65	73
Comprehensive income	\$ 3,264	\$ 3,538

[[]a] Net of deferred taxes of (\$3) million and (\$11) million during the six months ended June 30, 2023 and 2022, respectively.

Condensed Consolidated Statements of Financial Position (Unaudited) *Union Pacific Corporation and Subsidiary Companies*

Millions, Except Share and Per Share Amounts	Jun. 30, are and Per Share Amounts 2023		Ε	Dec. 31, 2022
Assets				
Current assets:				
Cash and cash equivalents	\$	830	\$	973
Short-term investments (Note 12)		-		46
Accounts receivable, net (Note 9)		1,826		1,891
Materials and supplies		742		741
Other current assets		354		301
Total current assets		3,752		3,952
Investments		2,524		2,375
Properties, net (Note 10)		56,641		56,038
Operating lease assets		1,651		1,672
Other assets		1,465		1,412
Total assets	\$	66,033	\$	65,449
Liabilities and Common Shareholders' Equity				
Current liabilities:				
Accounts payable and other current liabilities (Note 11)	\$	3,504	\$	3,842
Debt due within one year (Note 13)		1,745		1,678
Total current liabilities		5,249		5,520
Debt due after one year (Note 13)		31,557		31,648
Operating lease liabilities		1,217		1,300
Deferred income taxes		13,069		13,033
Other long-term liabilities		1,747		1,785
Commitments and contingencies (Note 14)				
Total liabilities		52,839		53,286
Common shareholders' equity:				
Common shares, \$2.50 par value, 1,400,000,000 authorized; 1,112,878,694 and				
1,112,623,886 issued; 609,398,738 and 612,393,321 outstanding, respectively		2,782		2,782
Paid-in-surplus		5,128		5,080
Retained earnings		60,500		58,887
Treasury stock		(54,699)		(54,004)
Accumulated other comprehensive loss (Note 8)		(517)		(582)
Total common shareholders' equity		13,194		12,163
Total liabilities and common shareholders' equity	\$	66,033	\$	65,449

Condensed Consolidated Statements of Cash Flows (Unaudited) *Union Pacific Corporation and Subsidiary Companies*

Millions, for the Six Months Ended June 30,	2023	2022
Operating Activities		
Net income	\$ 3,199	\$ 3,465
Adjustments to reconcile net income to cash provided by operating activities:		
Depreciation	1,149	1,114
Deferred and other income taxes	36	93
Other operating activities, net	(126)	(52)
Changes in current assets and liabilities:		
Accounts receivable, net	70	(330)
Materials and supplies	(1)	(169)
Other current assets	(86)	(39)
Accounts payable and other current liabilities	(340)	203
Income and other taxes	(43)	(118)
Cash provided by operating activities	3,858	4,167
Investing Activities		
Capital investments	(1,607)	(1,645)
Maturities of short-term investments (Note 12)	46	-
Proceeds from asset sales	45	120
Other investing activities, net	(158)	(15)
Cash used in investing activities	(1,674)	(1,540)
Financing Activities		
Debt repaid	(1,664)	(1,664)
Debt issued (Note 13)	1,599	4,090
Dividends paid	(1,588)	(1,556)
Share repurchase programs (Note 15)	(705)	(3,473)
Net issued/(paid) commercial paper (Note 13)	19	(151)
Other financing activities, net	11	(42)
Cash used in financing activities	(2,328)	(2,796)
Net change in cash, cash equivalents, and restricted cash	(144)	(169)
Cash, cash equivalents, and restricted cash at beginning of year	987	983
Cash, cash equivalents, and restricted cash at end of period	\$ 843	\$ 814
Supplemental Cash Flow Information		
Non-cash investing and financing activities:		
Capital investments accrued but not yet paid	\$ 207	\$ 241
Common shares repurchased but not yet paid	6	2
Cash (paid for)/received from:		
Income taxes, net of refunds	\$ (826)	\$ (1,033)
Interest, net of amounts capitalized	(628)	(565)
Reconciliation of cash, cash equivalents, and restricted cash		
to the Condensed Consolidated Statement of Financial Position:		
Cash and cash equivalents	\$ 830	\$ 788
Restricted cash equivalents in other current assets	4	22
	_	1
Restricted cash equivalents in other assets	9	4

Condensed Consolidated Statements of Changes in Common Shareholders' Equity (Unaudited)

Union Pacific Corporation and Subsidiary Companies

Millions	Common Shares	Treasury Shares	Common Shares	Paid-in- Surplus	Retained Earnings	Treasury Stock	AOCI [a]	Total
Balance at April 1, 2022	1,112.6	(484.4)		\$ 4,571	\$ 55,937	\$(50,515)		\$ 11,897
Net income	1,112.0	(101.1)	Ψ 2,102 -	ψ 1,07 T	1,835	-	φ (0.0)	1,835
Other comprehensive income/(loss)			_	_		_	37	37
Conversion, stock option exercises,			(4)	0.4		-		
forfeitures, ESPP, and other [b]	-	-	(1)	31	-	7	-	37
Share repurchase programs (Note 15)	-	(3.1)	-	428	-	(710)	-	(282)
Dividends declared (\$1.30 per share)	-	-	-	-	(814)	-	-	(814)
Balance at June 30, 2022	1,112.6	(487.5)	\$ 2,781	\$ 5,030	\$ 56,958	\$(51,218)	\$ (841)	\$ 12,710
Balance at April 1, 2023	1,112.9	(503.0)	\$ 2,782	\$ 5,099	\$ 59,724	\$(54,591)	\$ (560)	\$ 12,454
Net income			-	-	1,569	-	-	1,569
Other comprehensive income/(loss)			-	-	-	-	43	43
Conversion, stock option exercises,	_	0.1	_	29	_	13	_	42
forfeitures, ESPP, and other [b]	_		_	25				
Share repurchase programs (Note 15)	-	(0.6)	-	-	-	(121)	-	(121)
Dividends declared (\$1.30 per share)	-	-	-	-	(793)	-	-	(793)
Balance at June 30, 2023	1,112.9	(503.5)	\$ 2,782	\$ 5,128	\$ 60,500	\$(54,699)	\$ (517)	\$ 13,194
		_			5			
A Aillia in a	Common		Common	Paid-in-	Retained	Treasury	A O O L I = 1	T-4-1
Millions	Shares	Shares (473.6)	<i>Shares</i> \$ 2,781	<i>Surplus</i> \$ 4,979	Earnings	Stock	AOCI [a]	Total
Balance at January 1, 2022 Net income	1,112.4	(473.0)	Φ 2,701	Ф 4,979	\$ 55,049	\$(47,734)	\$ (914)	\$ 14,161
Other comprehensive income/(loss)			-	-	3,465	-	73	3,465 73
Conversion, stock option exercises,			-	-	-	=	13	13
forfeitures, ESPP, and other [b]	0.2	0.2	-	63	-	(21)	-	42
Share repurchase programs (Note 15)	-	(14.1)	-	(12)	-	(3,463)	-	(3,475)
Dividends declared (\$2.48 per share)	-	· -	-	-	(1,556)	· -	-	(1,556)
Balance at June 30, 2022	1,112.6	(487.5)	\$ 2,781	\$ 5,030	\$ 56,958	\$(51,218)	\$ (841)	\$ 12,710
Balance at January 1, 2023	1,112.6	(500.2)	\$ 2,782	\$ 5,080	\$ 58,887	\$(54,004)	\$ (582)	\$ 12,163
Net income			-	-	3,199	-	-	3,199
Other comprehensive income/(loss)			-	-	-	-	65	65
Conversion, stock option exercises,	0.3	0.2	_	48	_	17	_	65
forfeitures, ESPP, and other [b]	0.0			10				
Share repurchase programs (Note 15)	-	(3.5)	-	-	-	(712)	-	(712)
Dividends declared (\$2.60 per share)	_	_	-	-	(1,586)	-	-	(1,586)
Balance at June 30, 2023	1,112.9	(503.5)	\$ 2.782	\$ 5,128	\$ 60,500	\$(54,699)	\$ (517)	\$ 13,194

[[]a] AOCI = Accumulated Other Comprehensive Income/Loss (Note 8)

[[]b] ESPP = employee stock purchase plan

UNION PACIFIC CORPORATION AND SUBSIDIARY COMPANIES

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

For purposes of this report, unless the context otherwise requires, all references herein to "Union Pacific", "Corporation", "Company", "UPC", "we", "us", and "our" mean Union Pacific Corporation and its subsidiaries, including Union Pacific Railroad Company, which will be separately referred to herein as "UPRR" or the "Railroad".

1. Basis of Presentation

Our Condensed Consolidated Financial Statements are unaudited and reflect all adjustments (consisting of normal and recurring adjustments) that are, in the opinion of management, necessary for their fair presentation in conformity with accounting principles generally accepted in the United States of America (GAAP). Pursuant to the rules and regulations of the Securities and Exchange Commission (SEC), certain information and note disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted. Accordingly, this Quarterly Report on Form 10-Q should be read in conjunction with our Consolidated Financial Statements and notes thereto contained in our 2022 Annual Report on Form 10-K. Our Consolidated Statement of Financial Position at December 31, 2022, is derived from audited financial statements. The results of operations for the six months ended June 30, 2023, are not necessarily indicative of the results for the entire year ending December 31, 2023.

The Condensed Consolidated Financial Statements are presented in accordance with GAAP as codified in the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC).

2. Operations and Segmentation

The Railroad, along with its subsidiaries and rail affiliates, is our one reportable operating segment. Although we provide and analyze revenues by commodity group, we treat the financial results of the Railroad as one segment due to the integrated nature of our rail network. Our operating revenues are primarily derived from contracts with customers for the transportation of freight from origin to destination.

The following table represents a disaggregation of our freight and other revenues:

	Three Months Ended June 30,				Six Months Ended June 30,			
Millions	2023		2022		2023		2022	
Bulk	\$ 1,757	\$	1,813	\$	3,654	\$	3,645	
Industrial	2,086		2,091		4,103		4,012	
Premium	1,726		1,938		3,468		3,625	
Total freight revenues	\$ 5,569	\$	5,842	\$	11,225	\$	11,282	
Other subsidiary revenues	220		233		455		438	
Accessorial revenues	149		183		300		384	
Other	25		11		39		25	
Total operating revenues	\$ 5,963	\$	6,269	\$	12,019	\$	12,129	

Although our revenues are principally derived from customers domiciled in the U.S., the ultimate points of origination or destination for some products we transport are outside the U.S. Each of our commodity groups includes revenues from shipments to and from Mexico. Included in the above table are revenues from our Mexico business, which amounted to \$689 million and \$681 million for the three months ended June 30, 2023 and 2022, respectively, and \$1.4 billion and \$1.3 billion for the six months ended June 30, 2023 and 2022, respectively.

3. Stock-Based Compensation

We have several stock-based compensation plans where employees receive nonvested stock options, nonvested retention shares, and nonvested stock units. We refer to the nonvested shares and stock units collectively as "retention awards". Employees also are able to participate in our employee stock purchase plan (ESPP).

Information regarding stock-based compensation appears in the table below:

	Three Months Ended June 30,			Six Months Ended June 30,				
Millions		2023		2022		2023		2022
Stock-based compensation, before tax:								
Stock options	\$	4	\$	3	\$	8	\$	7
Retention awards		15		19		33		41
ESPP		5		4		11		8
Total stock-based compensation, before tax	\$	24	\$	26	\$	52	\$	56
Excess income tax benefits from equity compensation plans	\$	1	\$	1	\$	7	\$	18

Stock Options – Stock options are granted at the closing price on the date of grant, have 10-year contractual terms, and vest no later than 3 years from the date of grant. None of the stock options outstanding at June 30, 2023, are subject to performance or market-based vesting conditions.

The table below shows the annual weighted-average assumptions used for Black-Scholes valuation purposes:

Weighted-Average Assumptions	2023	}	2022
Risk-free interest rate	3.9	9%	1.6%
Dividend yield	2.0	6%	1.9%
Expected life (years)	4.9	5	4.4
Volatility	29.3	8%	28.7%
Weighted-average grant-date fair value of options granted	\$ 48.3	\$	51.92

The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant; the expected dividend yield is calculated as the ratio of dividends paid per share of common stock to the stock price on the date of grant; the expected life is based on historical and expected exercise behavior; and expected volatility is based on the historical volatility of our stock price over the expected life of the stock option.

A summary of stock option activity during the six months ended June 30, 2023, is presented below:

		W	eighted-	Weighted-Average	Agg	gregate
	Options		Average I	Remaining Contractual	Intrinsic	: Value
	(thous.)	Exerci	se Price	Term (in years)	(m	nillions)
Outstanding at January 1, 2023	1,974	\$	169.64	6.0	\$	86
Granted	351		202.81	N/A		N/A
Exercised	(72)		107.65	N/A		N/A
Forfeited or expired	(5)		224.05	N/A		N/A
Outstanding at June 30, 2023	2,248	\$	176.68	6.3	\$	75
Vested or expected to vest at June 30, 2023	2,228	\$	176.31	6.3	\$	75
Options exercisable at June 30, 2023	1,580	\$	160.07	5.2	\$	75

At June 30, 2023, there was \$25 million of unrecognized compensation expense related to nonvested stock options, which is expected to be recognized over a weighted-average period of 1.5 years. Additional information regarding stock option exercises appears in the following table:

	7	hree Months June 30	Six Months Ended June 30,			
Millions		2023	2022	20	23	2022
Intrinsic value of stock options exercised	\$	3 \$	2	\$	7 \$	44
Cash received from option exercises		4	2		8	17
Treasury shares repurchased for employee payroll taxes		(1)	-		(2)	(5)
Income tax benefit realized from option exercises		1	1		2	6
Aggregate grant-date fair value of stock options vested		-	-		14	13

Retention Awards – Retention awards are granted at no cost to the employee, vest over periods lasting up to 4 years, and dividends and dividend equivalents are paid to participants during the vesting periods.

Changes in our retention awards during the six months ended June 30, 2023, were as follows:

	Shares	Weighted-Averag	e Grant-
	(thous.)	Date Fa	air Value
Nonvested at January 1, 2023	1,069	\$	196.47
Granted	295		202.72
Vested	(300)		162.65
Forfeited	(25)		205.20
Nonvested at June 30, 2023	1,039	\$	207.80

At June 30, 2023, there was \$114 million of total unrecognized compensation expense related to nonvested retention awards, which is expected to be recognized over a weighted-average period of 1.8 years.

Performance Retention Awards – In February 2023, our Board of Directors approved performance stock unit grants. The basic terms of these performance stock units are identical to those granted in February 2022, including the annual return on invested capital (ROIC) and operating income growth (OIG) performance targets. The OIG performance targets compare to companies in the S&P 100 Industrials Index plus the Class I railroads. We define ROIC as net operating profit adjusted for interest expense (including interest on average operating lease liabilities) and taxes on interest divided by average invested capital adjusted for average operating lease liabilities.

The February 2023 stock units awarded to selected employees are subject to continued employment for 37 months, the attainment of certain levels of ROIC, and the relative three-year OIG. We expense two-thirds of the fair value of the units that are probable of being earned based on our forecasted ROIC over the three-year performance period, and with respect to the third year of the plan, the remaining one-third of the fair value is subject to the relative three-year OIG. We measure the fair value of performance stock units based upon the closing price of the underlying common stock as of the date of grant. Dividend equivalents are accumulated during the service period and paid to participants only after the units are earned.

Changes in our performance retention awards during the six months ended June 30, 2023, were as follows:

	Shares	Weighted-Average Grant-
	(thous.)	Date Fair Value
Nonvested at January 1, 2023	594	\$ 199.82
Granted	251	202.81
Vested	(73)	186.67
Unearned	(127)	186.11
Forfeited	(4)	222.66
Nonvested at June 30, 2023	641	\$ 205.06

At June 30, 2023, there was \$26 million of total unrecognized compensation expense related to nonvested performance retention awards, which is expected to be recognized over a weighted-average period of 1.6 years. This expense is subject to achievement of the performance measures established for the performance stock unit grants.

4. Retirement Plans

We provide defined benefit retirement income to eligible non-union employees through qualified and non-qualified (supplemental) pension plans. Qualified and non-qualified pension benefits are based on years of service and the highest compensation during the latest years of employment, with specific reductions made for early retirements. Non-union employees hired on or after January 1, 2018, are no longer eligible for pension benefits, but are eligible for an enhanced 401(k) plan.

Expense

Pension expense is determined based upon the annual service cost of benefits (the actuarial cost of benefits earned during a period) and the interest cost on those liabilities, less the expected return on plan assets. The expected long-term rate of return on plan assets is applied to a calculated value of plan assets that recognizes changes in fair value over a 5-year period. This practice is intended to reduce year-to-year volatility in pension expense, but it can have the effect of delaying the recognition of differences between actual returns on assets and expected returns based on long-term rate of return assumptions. Differences in actual experience in relation to assumptions are not recognized in net income immediately but are deferred in accumulated other comprehensive income/loss and, if necessary, amortized as pension expense.

The components of our net periodic pension benefit/cost were as follows:

	Three Mon June	Ended	Six Months Ended June 30,					
Millions		2023		2022		2023		2022
Service cost	\$	12	\$	26	\$	25	\$	52
Interest cost		46		31		92		62
Expected return on plan assets		(62)		(73)		(124)		(146)
Amortization of actuarial loss		2		21		4		43
Net periodic pension (benefit)/cost	\$	(2)	\$	5	\$	(3)	\$	11

Cash Contributions

For the six months ended June 30, 2023, cash contributions totaled \$0 to the qualified pension plans. Any contributions made during 2023 will be based on cash generated from operations and financial market considerations. Our policy with respect to funding the qualified pension plans is to fund at least the minimum required by law and not more than the maximum amount deductible for tax purposes. At June 30, 2023, we do not have minimum cash funding requirements for 2023.

5. Other Income

Other income included the following:

	Three Months Ended June 30,				Six Months June 3		
Millions		2023	2022		2023	2022	
Real estate income [a] [b]	\$	69 \$	146	\$	245	206	
Net periodic pension benefit/(costs)		14	21		28	41	
Environmental remediation and restoration		(3)	(5)		(22)	(31)	
Other [a]		13	1		26	(6)	
Total	\$	93 \$	163	\$	277	210	

[[]a] Prior periods have been reclassified to conform to the current period disclosure.

6. Income Taxes

In the second quarter of 2023, the state of Nebraska enacted legislation to reduce its corporate income tax rate for future years resulting in a \$73 million reduction of our deferred tax expense.

In the second quarter of 2022, the state of Nebraska enacted legislation to reduce its corporate income tax rate for future years resulting in a \$55 million reduction of our deferred tax expense.

7. Earnings Per Share

The following table provides a reconciliation between basic and diluted earnings per share:

	Three Months Ended June 30,				Six Months En June 30,				
Millions, Except Per Share Amounts		2023		2022	-	2023		2022	
Net income	\$	1,569	\$	1,835	\$	3,199	\$	3,465	
Weighted-average number of shares outstanding:									
Basic		608.7		625.6		609.6		628.9	
Dilutive effect of stock options		0.3		0.6		0.4		0.7	
Dilutive effect of retention shares and units		0.5		0.6		0.5		0.6	
Diluted		609.5		626.8		610.5		630.2	
Earnings per share – basic	\$	2.58	\$	2.93	\$	5.25	\$	5.51	
Earnings per share – diluted	\$	2.57	\$	2.93	\$	5.24	\$	5.50	
Stock options excluded as their inclusion would be anti-dilutive		1.0		0.3		0.9		0.3	

[[]b] 2023 includes a one-time \$107 million transaction. 2022 includes a \$79 million gain from a land sale to the Illinois State Toll Highway Authority.

8. Accumulated Other Comprehensive Income/Loss

Reclassifications out of accumulated other comprehensive income/loss were as follows (net of tax):

		Defined benefit	Foreign currency	Unrealized gain on derivative		
Millions		plans	translation	instruments [a]		Total
Balance at April 1, 2023	\$	(379)	\$ (181)	\$ -	\$	(560)
Other comprehensive income/(loss) before reclassifications	•	6	21	16	•	43
Amounts reclassified from accumulated other comprehensive						
income/(loss) [b]		-	-	-		-
Net quarter-to-date other comprehensive income/(loss), net of			04	40		40
taxes of (\$3) million		6	21	16		43
Balance at June 30, 2023	\$	(373)	\$ (160)	\$ 16	\$	(517)
Balance at April 1, 2022	\$	(643)	\$ (235)	\$ -	\$	(878)
Other comprehensive income/(loss) before reclassifications		-	23	-		23
Amounts reclassified from accumulated other comprehensive		14				14
income/(loss) [b]		14				14
Net quarter-to-date other comprehensive income/(loss), net of		14	23	_		37
taxes of (\$6) million			20			
Balance at June 30, 2022	\$	(629)	\$ (212)	\$ -	\$	(841)
		Defined	Faraian			
			Foreign	Unrealized gain		
		benefit	currency	on derivative		
Millions		benefit plans	 currency translation	on derivative instruments [a]		Total
Balance at January 1, 2023	\$	benefit plans (378)	\$ currency translation (204)	on derivative instruments [a]	\$	(582)
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications	\$	benefit plans	\$ currency translation	on derivative instruments [a]	\$	
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive	\$	benefit plans (378) 6	\$ currency translation (204)	on derivative instruments [a]	\$	(582) 66
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b]	\$	benefit plans (378)	\$ currency translation (204)	on derivative instruments [a]	\$	(582)
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes	\$	benefit plans (378) 6	\$ currency translation (204)	on derivative instruments [a]	\$	(582) 66
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes of (\$3) million		benefit plans (378) 6 (1)	currency translation (204) 44 -	on derivative instruments [a] \$ - 16		(582) 66 (1)
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes	\$	benefit plans (378) 6 (1)	\$ currency translation (204) 44	on derivative instruments [a] \$ - 16	\$	(582) 66 (1)
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes of (\$3) million Balance at June 30, 2023		benefit plans (378) 6 (1) 5 (373)	\$ currency translation (204) 44 44 (160)	on derivative instruments [a] \$ - 16 - 16 \$ 16	\$	(582) 66 (1) 65 (517)
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes of (\$3) million Balance at June 30, 2023 Balance at January 1, 2022	\$	benefit plans (378) 6 (1)	currency translation (204) 44 -	on derivative instruments [a] \$ - 16		(582) 66 (1)
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes of (\$3) million Balance at June 30, 2023 Balance at January 1, 2022 Other comprehensive income/(loss) before reclassifications	\$	benefit plans (378) 6 (1) 5 (373)	\$ currency translation (204) 44 - 44 (160)	on derivative instruments [a] \$ - 16 - 16 \$ 16	\$	(582) 66 (1) 65 (517) (914) 44
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes of (\$3) million Balance at June 30, 2023 Balance at January 1, 2022	\$	benefit plans (378) 6 (1) 5 (373)	\$ currency translation (204) 44 - 44 (160)	on derivative instruments [a] \$ - 16 - 16 \$ 16	\$	(582) 66 (1) 65 (517) (914)
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes of (\$3) million Balance at June 30, 2023 Balance at January 1, 2022 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive	\$	benefit plans (378) 6 (1) 5 (373) (658) -	\$ currency translation (204) 44 - 44 (160) (256) 44	on derivative instruments [a] \$ - 16 - 16 \$ 16	\$	(582) 66 (1) 65 (517) (914) 44 29
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes of (\$3) million Balance at June 30, 2023 Balance at January 1, 2022 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b]	\$	benefit plans (378) 6 (1) 5 (373)	\$ currency translation (204) 44 - 44 (160)	on derivative instruments [a] \$ - 16 - 16 \$ 16	\$	(582) 66 (1) 65 (517) (914) 44
Balance at January 1, 2023 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes of (\$3) million Balance at June 30, 2023 Balance at January 1, 2022 Other comprehensive income/(loss) before reclassifications Amounts reclassified from accumulated other comprehensive income/(loss) [b] Net year-to-date other comprehensive income/(loss), net of taxes	\$	benefit plans (378) 6 (1) 5 (373) (658) -	\$ currency translation (204) 44 - 44 (160) (256) 44	on derivative instruments [a] \$ - 16 - 16 \$ 16	\$	(582) 66 (1) 65 (517) (914) 44 29

[[]a] Related to interest rate swaps from equity method investments.

[[]b] The accumulated other comprehensive income/loss reclassification components are 1) prior service cost/credit and 2) net actuarial loss, which are both included in the computation of net periodic pension benefit/cost. See Note 4 Retirement Plans for additional details.

9. Accounts Receivable

Accounts receivable includes freight and other receivables reduced by an allowance for doubtful accounts. At June 30, 2023, and December 31, 2022, our accounts receivables were reduced by \$11 million and \$10 million, respectively. Receivables not expected to be collected in one year and the associated allowances are classified as other assets in our Condensed Consolidated Statements of Financial Position. At June 30, 2023, and December 31, 2022, receivables classified as other assets were reduced by allowances of \$67 million and \$58 million, respectively.

Receivables Securitization Facility – The Railroad maintains an \$800 million, 3-year receivables securitization facility (the Receivables Facility) maturing in July 2025. Under the Receivables Facility, the Railroad sells most of its eligible third-party receivables to Union Pacific Receivables, Inc. (UPRI), a consolidated, wholly-owned, bankruptcy-remote subsidiary that may subsequently transfer, without recourse, an undivided interest in accounts receivable to investors. The investors have no recourse to the Railroad's other assets except for customary warranty and indemnity claims. Creditors of the Railroad do not have recourse to the assets of UPRI.

The amount recorded under the Receivables Facility was \$400 million and \$100 million at June 30, 2023, and December 31, 2022, respectively. The Receivables Facility was supported by \$1.5 billion and \$1.6 billion of accounts receivable as collateral at June 30, 2023, and December 31, 2022, respectively, which, as a retained interest, is included in accounts receivable, net in our Condensed Consolidated Statements of Financial Position.

The outstanding amount the Railroad maintains under the Receivables Facility may fluctuate based on current cash needs. The maximum allowed under the Receivables Facility is \$800 million with availability directly impacted by eligible receivables, business volumes, and credit risks, including receivables payment quality measures such as default and dilution ratios. If default or dilution ratios increase one percent, the allowable outstanding amount under the Receivables Facility would not materially change.

The costs of the Receivables Facility include interest, which will vary based on prevailing benchmark and commercial paper rates, program fees paid to participating banks, commercial paper issuance costs, and fees of participating banks for unused commitment availability. The costs of the Receivables Facility are included in interest expense and were \$1 million and \$3 million for the three months ended June 30, 2023 and 2022, respectively, and \$4 million for both of the six months ended June 30, 2023 and 2022.

10. Properties

The following tables list the major categories of property and equipment, as well as the weighted-average estimated useful life for each category (in years):

Millions, Except Estimated Useful Life			nulated	Net Book	Estimated
As of June 30, 2023	Cost	Depr	eciation	Value	Useful Life
Land	\$ 5,365	\$	N/A	\$ 5,365	N/A
Road:					
Rail and other track material	18,633		7,222	11,411	42
Ties	11,845		3,799	8,046	34
Ballast	6,285		2,004	4,281	34
Other roadway [a]	22,721		5,173	17,548	47
Total road	59,484		18,198	41,286	N/A
Equipment:					
Locomotives	9,319		3,690	5,629	18
Freight cars	2,628		935	1,693	23
Work equipment and other	1,301		508	793	17
Total equipment	13,248		5,133	8,115	N/A
Technology and other	1,280		539	741	12
Construction in progress	1,134		-	1,134	N/A
Total	\$ 80,511	\$	23,870	\$ 56,641	N/A
Millions, Except Estimated Useful Life			nulated	Net Book	Estimated
As of December 31, 2022	Cost		eciation	Value	Useful Life
As of December 31, 2022 Land	\$ Cost 5,344			\$	
As of December 31, 2022 Land Road:	\$ 5,344	Depr	eciation N/A	\$ <i>Value</i> 5,344	Useful Life
As of December 31, 2022 Land	\$ 5,344 18,419	Depr	eciation	\$ Value	Useful Life
As of December 31, 2022 Land Road: Rail and other track material Ties	\$ 5,344 18,419 11,676	Depr	N/A 7,096 3,699	\$ Value 5,344 11,323 7,977	Useful Life N/A 43 34
As of December 31, 2022 Land Road: Rail and other track material	\$ 5,344 18,419 11,676 6,222	Depr	7,096 3,699 1,950	\$ Value 5,344 11,323 7,977 4,272	Useful Life N/A 43
As of December 31, 2022 Land Road: Rail and other track material Ties	\$ 5,344 18,419 11,676	Depr	N/A 7,096 3,699	\$ Value 5,344 11,323 7,977	Useful Life N/A 43 34
As of December 31, 2022 Land Road: Rail and other track material Ties Ballast	\$ 5,344 18,419 11,676 6,222	Depr	7,096 3,699 1,950	\$ Value 5,344 11,323 7,977 4,272	Useful Life N/A 43 34 34
As of December 31, 2022 Land Road: Rail and other track material Ties Ballast Other roadway [a] Total road Equipment:	\$ 5,344 18,419 11,676 6,222 22,411	Depr	7,096 3,699 1,950 4,970	\$ Value 5,344 11,323 7,977 4,272 17,441	Useful Life N/A 43 34 34 47
As of December 31, 2022 Land Road: Rail and other track material Ties Ballast Other roadway [a] Total road	\$ 5,344 18,419 11,676 6,222 22,411	Depr	7,096 3,699 1,950 4,970	\$ Value 5,344 11,323 7,977 4,272 17,441	Useful Life N/A 43 34 34 47
As of December 31, 2022 Land Road: Rail and other track material Ties Ballast Other roadway [a] Total road Equipment:	\$ 5,344 18,419 11,676 6,222 22,411 58,728	Depr	7,096 3,699 1,950 4,970 17,715	\$ 7,977 4,272 17,441 41,013	Useful Life N/A 43 34 34 47 N/A
As of December 31, 2022 Land Road: Rail and other track material Ties Ballast Other roadway [a] Total road Equipment: Locomotives	\$ 5,344 18,419 11,676 6,222 22,411 58,728	Depr	7,096 3,699 1,950 4,970 17,715	\$ Value 5,344 11,323 7,977 4,272 17,441 41,013	Useful Life N/A 43 34 34 47 N/A
As of December 31, 2022 Land Road: Rail and other track material Ties Ballast Other roadway [a] Total road Equipment: Locomotives Freight cars	\$ 5,344 18,419 11,676 6,222 22,411 58,728 9,166 2,562	Depr	7,096 3,699 1,950 4,970 17,715 3,606 898	\$ Value 5,344 11,323 7,977 4,272 17,441 41,013 5,560 1,664	Useful Life N/A 43 34 34 47 N/A
As of December 31, 2022 Land Road: Rail and other track material Ties Ballast Other roadway [a] Total road Equipment: Locomotives Freight cars Work equipment and other	\$ 5,344 18,419 11,676 6,222 22,411 58,728 9,166 2,562 1,253	Depr	7,096 3,699 1,950 4,970 17,715 3,606 898 473	\$ Value 5,344 11,323 7,977 4,272 17,441 41,013 5,560 1,664 780	Useful Life N/A 43 34 47 N/A 18 23 17
As of December 31, 2022 Land Road: Rail and other track material Ties Ballast Other roadway [a] Total road Equipment: Locomotives Freight cars Work equipment and other Total equipment	\$ 5,344 18,419 11,676 6,222 22,411 58,728 9,166 2,562 1,253 12,981	Depr	7,096 3,699 1,950 4,970 17,715 3,606 898 473 4,977	\$ 780 8,004	Useful Life N/A 43 34 47 N/A 18 23 17 N/A

[[]a] Other roadway includes grading, bridges and tunnels, signals, buildings, and other road assets.

11. Accounts Payable and Other Current Liabilities

Millions	Jun. 2	30, 023	Dec. 31, 2022
Accounts payable	\$	894	\$ 784
Income and other taxes payable		563	628
Compensation-related accruals		524	938
Interest payable		394	379
Current operating lease liabilities		346	331
Accrued casualty costs		267	242
Equipment rents payable		101	109
Other		415	431
Total accounts payable and other current liabilities	\$ 3,	504	\$ 3,842

12. Financial Instruments

Short-Term Investments – As of June 30, 2023, the Company has no short-term investments. As of December 31, 2022, the Company had \$46 million of short-term investments, which consisted of time deposits. These investments are considered Level 2 investments and are valued at amortized cost, which approximates fair value. All short-term investments have a maturity of less than one year and are classified as held-to-maturity.

Fair Value of Financial Instruments – The fair value of our short- and long-term debt was estimated using a market value price model, which utilizes applicable U.S. Treasury rates along with current market quotes on comparable debt securities. All of the inputs used to determine the fair market value of the Corporation's long-term debt are Level 2 inputs and obtained from an independent source. At June 30, 2023, the fair value of total debt was \$28.3 billion, approximately \$5.0 billion less than the carrying value. At December 31, 2022, the fair value of total debt was \$28.1 billion, approximately \$5.2 billion less than the carrying value. The fair value of the Corporation's debt is a measure of its current value under present market conditions. The fair value of our cash equivalents approximates their carrying value due to the short-term maturities of these instruments.

13. Debt

Credit Facilities – At June 30, 2023, we had \$2.0 billion of credit available under our revolving credit facility (the Facility), which is designated for general corporate purposes and supports the issuance of commercial paper. Credit facility withdrawals totaled \$0 during the six months ended June 30, 2023. Commitment fees and interest rates payable under the Facility are similar to fees and rates available to comparably rated, investment-grade borrowers. The Facility allows for borrowings at floating rates based on Term Secured Overnight Financing Rate (SOFR), plus a spread, depending upon credit ratings for our senior unsecured debt. The Facility, set to expire May 20, 2027, requires UPC to maintain a debt-to-EBITDA (earnings before interest, taxes, depreciation, and amortization) coverage ratio.

The definition of debt used for purposes of calculating the debt-to-EBITDA coverage ratio includes, among other things, certain credit arrangements, finance leases, guarantees, unfunded and vested pension benefits under Title IV of ERISA, and unamortized debt discount and deferred debt issuance costs. At June 30, 2023, the Company was in compliance with the debt-to-EBITDA coverage ratio, which allows us to carry up to \$45.9 billion of debt (as defined in the Facility), and we had \$35.1 billion of debt (as defined in the Facility) outstanding at that date. The Facility does not include any other financial restrictions, credit rating triggers (other than rating-dependent pricing), or any other provision that could require us to post collateral. The Facility also includes a \$150 million cross-default provision and a change-of-control provision.

During the six months ended June 30, 2023, we issued \$974 million and repaid \$950 million of commercial paper with maturities ranging from 11 to 88 days, and at June 30, 2023, we had \$224 million of commercial paper with a weighted average interest rate of 5.3% outstanding. Our revolving credit facility supports our outstanding commercial paper balances, and, unless we change the terms of our commercial paper program, our aggregate issuance of commercial paper will not exceed the amount of borrowings available under the Facility.

Shelf Registration Statement and Significant New Borrowings – On February 3, 2022, the Board of Directors renewed its authorization for the Company to issue up to \$12.0 billion of debt securities under the Company's current three-year shelf registration filed on February 10, 2021. Under our shelf registration, we may issue, from time to time any combination of debt securities, preferred stock, common stock, or warrants for debt securities or preferred stock in one or more offerings.

During the six months ended June 30, 2023, we issued the following unsecured, fixed-rate debt securities under our shelf registration:

Date	Description of Securities
February 21, 2023	\$0.50 billion of 4.750% Notes due February 21, 2026
	\$0.50 billion of 4.950% Notes due May 15, 2053

We used the net proceeds from the offerings for general corporate purposes, including the repurchase of common stock pursuant to our share repurchase programs. These debt securities include change-of-control provisions. At June 30, 2023, we had remaining authority to issue up to \$5.6 billion of debt securities under our shelf registration.

Receivables Securitization Facility – As of June 30, 2023, and December 31, 2022, we recorded \$400 million and \$100 million, respectively, of borrowings under our Receivables Facility as secured debt. (See further discussion of our receivables securitization facility in Note 9).

14. Commitments and Contingencies

Asserted and Unasserted Claims – Various claims and lawsuits are pending against us and certain of our subsidiaries. We cannot fully determine the effect of all asserted and unasserted claims on our consolidated results of operations, financial condition, or liquidity. To the extent possible, we have recorded a liability where asserted and unasserted claims are considered probable and where such claims can be reasonably estimated. We currently do not expect that any known lawsuits, claims, environmental costs, commitments, contingent liabilities, or guarantees will have a material adverse effect on our consolidated results of operations, financial condition, or liquidity after taking into account liabilities and insurance recoveries previously recorded for these matters.

In December 2019, we received a putative class action complaint under the Illinois Biometric Information Privacy Act, alleging violation due to the use of a finger scan system developed and managed by third parties. Union Pacific and the plaintiff are currently in the discovery phase. While we believe that we have strong defenses to the claims made in the complaint and will vigorously defend ourselves, there is no assurance regarding the ultimate outcome. Therefore, the outcome of this litigation is inherently uncertain, and we cannot reasonably estimate any loss or range of loss that may arise from this matter.

Personal Injury – The Federal Employers' Liability Act (FELA) governs compensation for work-related accidents. Under FELA, damages are assessed based on a finding of fault through litigation or out-of-court settlements. We offer a comprehensive variety of services and rehabilitation programs for employees who are injured at work.

Approximately 95% of the recorded liability is related to asserted claims and approximately 5% is related to unasserted claims at June 30, 2023. Because of the uncertainty surrounding the ultimate outcome of personal injury claims, it is reasonably possible that future costs to settle these claims may range from approximately \$367 million to \$473 million. We record an accrual at the low end of the range as no amount of loss within the range is more probable than any other. Estimates can vary over time due to evolving trends in litigation.

Our personal injury liability activity was as follows:

Millions, for the Six Months Ended June 30,	2023	2022
Beginning balance	\$ 361	\$ 325
Current year accruals	52	51
Changes in estimates for prior years	31	36
Payments	(77)	(65)
Ending balance at June 30,	\$ 367	\$ 347
Current portion, ending balance at June 30,	\$ 98	\$ 70

Environmental Costs – We are subject to federal, state, and local environmental laws and regulations. We have identified 347 sites where we are or may be liable for remediation costs associated with alleged contamination or for violations of environmental requirements. This includes 32 sites that are the subject of actions taken by the U.S. government, including 20 that are currently on the Superfund National Priorities List. Certain federal legislation imposes joint and several liability for the remediation of identified sites; consequently, our ultimate environmental liability may include costs relating to activities of other parties, in addition to costs relating to our own activities at each site.

Our environmental liability activity was as follows:

Millions, for the Six Months Ended June 30,	2023	2022
Beginning balance	\$ 253	\$ 243
Accruals	62	52
Payments	(50)	(29)
Ending balance at June 30,	\$ 265	\$ 266
Current portion, ending balance at June 30,	\$ 78	\$ 64

The environmental liability includes future costs for remediation and restoration of sites, as well as ongoing monitoring costs, but excludes any anticipated recoveries from third-parties. Cost estimates are based on information available for each site, financial viability of other potentially responsible parties, and existing technology, laws, and regulations. The ultimate liability for remediation is difficult to determine because of the number of potentially responsible parties, site-specific cost sharing arrangements with other potentially responsible parties, the degree of contamination by various wastes, the scarcity and quality of volumetric data related to many of the sites, and the speculative nature of remediation costs. Estimates of liability may vary over time due to changes in federal, state, and local laws governing environmental remediation. Current obligations are not expected to have a material adverse effect on our consolidated results of operations, financial condition, or liquidity.

Insurance – The Company has a consolidated, wholly-owned captive insurance subsidiary (the Captive), that provides insurance coverage for certain risks including general liability, property, cyber, and FELA claims that are subject to reinsurance. The Captive receives direct premiums, which are netted against the Company's premium costs in other expenses in the Condensed Consolidated Statements of Income. We record both liabilities and reinsurance receivables using an actuarial analysis based on historical experience in our Condensed Consolidated Statements of Financial Position.

Indemnities – Our maximum potential exposure under indemnification arrangements, including certain tax indemnifications, can range from a specified dollar amount to an unlimited amount, depending on the nature of the transactions and the agreements. Due to uncertainty as to whether claims will be made or how they will be resolved, we cannot reasonably determine the probability of an adverse claim or reasonably estimate any adverse liability or the total maximum exposure under these indemnification arrangements. We do not have any reason to believe that we will be required to make any material payments under these indemnity provisions.

15. Share Repurchase Programs

Effective April 1, 2022, our Board of Directors authorized the repurchase of up to 100 million shares of our common stock by March 31, 2025. As of June 30, 2023, we repurchased a total of 19.6 million shares of our common stock under the 2022 authorization. These repurchases may be made on the open market or through other transactions. Our management has sole discretion with respect to determining the timing and amount of these transactions.

Our previous authorization, which was effective April 1, 2019, through March 31, 2022, was approved by our Board of Directors for up to 150 million shares of common stock. As of March 31, 2022, we repurchased a total of 83.3 million shares of our common stock under the 2019 authorization.

The table below represents shares repurchased under repurchase programs in the six months ended June 30, 2023 and 2022:

	Number of Shar	es Purchased	Average	e Paid [a]	
	2023	2022	2023		2022
First quarter [b]	2,908,703	11,014,201	\$ 203.19	\$	249.95
Second quarter [c]	606,581	3,100,683	199.81		232.87
Total	3,515,284	14,114,884	\$ 202.61	\$	246.20
Remaining number of shares that may be repurch		80	0,392,027		

[[]a] In the period of the final settlement, the average price paid under the accelerated share repurchase programs is calculated based on the total program value less the value assigned to the initial delivery of shares. The average price of the completed 2022 accelerated share repurchase programs was \$248.32.

[[]b] Includes 7,012,232 shares repurchased in 2022 under accelerated share repurchase programs.

[[]c] Includes 1,847,185 shares repurchased in 2022 under accelerated share repurchase programs.

Management's assessments of market conditions and other pertinent factors guide the timing, manner, and volume of all repurchases. We expect to fund any share repurchases under this program through cash generated from operations, the sale or lease of various operating and non-operating properties, debt issuances, and cash on hand. Open market repurchases are recorded in treasury stock at cost, which includes any applicable commissions, fees, and excise taxes.

Accelerated Share Repurchase Programs – The Company has established accelerated share repurchase programs (ASRs) with financial institutions to repurchase shares of our common stock. These ASRs have been structured so that at the time of commencement, we pay a specified amount to the financial institutions and receive an initial delivery of shares. Additional shares may be received at the time of settlement. The final number of shares to be received is based on the volume weighted average price of the Company's common stock during the ASR term, less a discount and subject to potential adjustments pursuant to the terms of such ASR.

On February 18, 2022, the Company received 7,012,232 shares of its common stock repurchased under ASRs for an aggregate of \$2.2 billion. Upon settlement of these ASRs in the second quarter of 2022, we received 1,847,185 additional shares.

ASRs are accounted for as equity transactions, and at the time of receipt, shares are included in treasury stock at fair market value as of the corresponding initiation or settlement date. The Company reflects shares received as a repurchase of common stock in the weighted average common shares outstanding calculation for basic and diluted earnings per share.

16. Related Parties

UPRR and other North American railroad companies jointly own TTX Company (TTX). UPRR has a 37.03% economic and voting interest in TTX while the other North American railroads own the remaining interest. In accordance with ASC 323 *Investments - Equity Method and Joint Venture*, UPRR applies the equity method of accounting to our investment in TTX.

TTX is a rail car pooling company that owns rail cars and intermodal wells to serve North America's railroads. TTX assists railroads in meeting the needs of their customers by providing rail cars in an efficient, pooled environment. All railroads have the ability to utilize TTX rail cars through car hire by renting rail cars at stated rates.

UPRR had \$1.8 billion and \$1.7 billion recognized as investments related to TTX in our Condensed Consolidated Statements of Financial Position as of June 30, 2023, and December 31, 2022, respectively. TTX car hire expenses of \$102 million and \$98 million for the three months ended June 30, 2023 and 2022, respectively, and \$205 million and \$192 million for the six months ended June 30, 2023 and 2022, respectively, are included in equipment and other rents in our Condensed Consolidated Statements of Income. In addition, UPRR had accounts payable to TTX of \$68 million as of both June 30, 2023, and December 31, 2022.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

UNION PACIFIC CORPORATION AND SUBSIDIARY COMPANIES RESULTS OF OPERATIONS

Three and Six Months Ended June 30, 2023, Compared to Three and Six Months Ended June 30, 2022

For purposes of this report, unless the context otherwise requires, all references herein to "Union Pacific", "UPC", "Corporation", "Company", "we", "us", and "our" shall mean Union Pacific Corporation and its subsidiaries, including Union Pacific Railroad Company, which we separately refer to as "UPRR" or the "Railroad".

The following discussion should be read in conjunction with the Condensed Consolidated Financial Statements and applicable notes to the Condensed Consolidated Financial Statements, Item 1, and other information included in this report. Our Condensed Consolidated Financial Statements are unaudited and reflect all adjustments (consisting only of normal and recurring adjustments) that are, in the opinion of management, necessary for their fair presentation in conformity with accounting principles generally accepted in the United States of America (GAAP).

The Railroad, along with its subsidiaries and rail affiliates, is our one reportable business segment. Although revenues are analyzed by commodity, we analyze the net financial results of the Railroad as one segment due to the integrated nature of the rail network.

Critical Accounting Estimates

The preparation of these financial statements requires estimation and judgment that affect the reported amounts of revenues, expenses, assets, and liabilities. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. If these estimates differ materially from actual results, the impact on the Condensed Consolidated Financial Statements may be material. Our critical accounting estimates are available in Item 7 of our 2022 Annual Report on Form 10-K. During the first six months of 2023, there have not been any significant changes with respect to our critical accounting estimates.

RESULTS OF OPERATIONS

Quarterly Summary

The Company reported earnings of \$2.57 per diluted share on net income of \$1.6 billion and an operating ratio of 63.0% in the second quarter of 2023 compared to earnings of \$2.93 per diluted share on net income of \$1.8 billion and an operating ratio of 60.2% for the second quarter of 2022. Freight revenues decreased 5% in the quarter compared to the same period in 2022 driven by a 3% decrease in average revenue per car (ARC) and a 2% decline in volume. The ARC decrease was driven by lower fuel surcharge revenues and negative mix of traffic (for example, a relative decrease in forest product shipments, which have a higher ARC), partially offset by core pricing gains. Volume decreases were primarily driven by weaker markets for intermodal and forest product shipments. These declines were partially offset by increased production and inventory replenishment in the automotive industry, continued strength in rock shipments, and a domestic intermodal contract win.

Our overall network fluidity improved compared to the second quarter of 2022 as last year we experienced congestion across our network related to a lack of available crew resources. As a result, we accelerated hiring and training of new employees over the past year, graduated 2,263 employees between May 6, 2022, and July 7, 2023, and, as of July 7, 2023, have 769 individuals currently in the training pipeline.

Operating expenses decreased slightly compared to the second quarter of 2022 due to lower fuel prices and volume related costs, offset by inflation, a one-time \$67 million expense from ratification of a crew staffing agreement with the International Association of Sheet Metal, Air, Rail and Transportation Workers (the ratification charge), and increased workforce levels. Operating income of \$2.2 billion decreased 12% and our operating ratio of 63.0% deteriorated 2.8 points from the second quarter of 2022.

Operating Revenues

	 Three Months Ended June 30,					Six Months Ended June 30,				
Millions	2023		2022	Change	2023		2022	Change		
Freight revenues	\$ 5,569	\$	5,842	(5)% \$	11,225	\$	11,282	(1)%		
Other subsidiary revenues	220		233	(6)	455		438	4		
Accessorial revenues	149		183	(19)	300		384	(22)		
Other	25		11	F	39		25	56		
Total	\$ 5,963	\$	6,269	(5)% \$	12,019	\$	12,129	(1)%		

We generate freight revenues by transporting products from our three commodity groups. Freight revenues vary with volume (carloads) and ARC. Changes in price, traffic mix, and fuel surcharges drive ARC. Customer incentives, which are primarily provided for shipping to/from specific locations or based on cumulative volumes, are recorded as a reduction to operating revenues. Customer incentives that include variable consideration based on cumulative volumes are estimated using the expected value method, which is based on available historical, current, and forecasted volumes, and recognized as the related performance obligation is satisfied. We recognize freight revenues over time as shipments move from origin to destination. The allocation of revenues between reporting periods is based on the relative transit time in each reporting period with expenses recognized as incurred.

Other subsidiary revenues (primarily logistics and commuter rail operations) are generally recognized over time as shipments move from origin to destination. The allocation of revenues between reporting periods is based on the relative transit time in each reporting period with expenses recognized as incurred. Accessorial revenues are recognized at a point in time as performance obligations are satisfied.

Freight revenues decreased 5% in the second quarter of 2023 compared to the same period in 2022 driven by a 3% decrease in ARC and a 2% decline in volume. The ARC decrease was driven by lower fuel surcharge revenues and negative mix of traffic (for example, a relative decrease in forest product shipments, which have a higher ARC), partially offset by core pricing gains. Volume decreases were primarily driven by weaker markets for intermodal and forest product shipments. These declines were partially offset by increased production and inventory replenishment in the automotive industry, continued strength in rock shipments, and a domestic intermodal contract win.

Each of our commodity groups includes revenues from fuel surcharges. Freight revenues from fuel surcharge programs decreased to \$707 million in the second quarter of 2023 compared to \$976 million in the same period of 2022 due to lower fuel prices and lower volume, partially offset by the lag impact on fuel surcharge (it can generally take up to two months for changing fuel prices to affect fuel surcharge recoveries).

Other subsidiary revenues decreased in the second quarter of 2023 compared to 2022 primarily driven by a weaker market for intermodal shipments at our subsidiary that brokers intermodal and transload logistics services. Accessorial revenues decreased in the second quarter of 2023 compared to 2022 driven by decreased intermodal accessorial and container revenues due to lower volume and improvements in the global supply chain as reflected by better equipment cycle times.

The following tables summarize the year-over-year changes in freight revenues, revenue carloads, and ARC by commodity type:

	Thre	ee M	lonths End	ded	Six Months Ended			
Freight Revenues		Ju	ıne 30,			J	une 30,	
Millions	2023		2022	Change	2023		2022	Change
Grain & grain products	\$ 890	\$	867	3%	\$ 1,833	\$	1,744	5%
Fertilizer	183		183	-	369		363	2
Food & refrigerated	255		271	(6)	518		538	(4)
Coal & renewables	429		492	(13)	934		1,000	(7)
Bulk	1,757		1,813	(3)	3,654		3,645	-
Industrial chemicals & plastics	545		557	(2)	1,081		1,077	-
Metals & minerals	562		562	-	1,098		1,047	5
Forest products	347		386	(10)	679		750	(9)
Energy & specialized markets	632		586	8	1,245		1,138	9
Industrial	2,086		2,091	-	4,103		4,012	2
Automotive	625		561	11	1,212		1,062	14
Intermodal	1,101		1,377	(20)	2,256		2,563	(12)
Premium	1,726		1,938	(11)	3,468		3,625	(4)
Total	\$ 5,569	\$	5,842	(5)%	\$ 11,225	\$	11,282	(1)%

	Three	Months En	ded	Six N	Nonths Ende	∍d	
Revenue Carloads		June 30,	June 30,				
Thousands,	2023	2022	Change	2023	2022	Change	
Grain & grain products	197	195	1%	399	400	-%	
Fertilizer	48	53	(9)	93	98	(5)	
Food & refrigerated	44	48	(8)	88	95	(7)	
Coal & renewables	203	202	-	419	427	(2)	
Bulk	492	498	(1)	999	1,020	(2)	
Industrial chemicals & plastics	164	161	2	321	321	-	
Metals & minerals	210	205	2	398	387	3	
Forest products	55	63	(13)	107	127	(16)	
Energy & specialized markets	144	141	2	283	272	4	
Industrial	573	570	1	1,109	1,107	-	
Automotive	213	192	11	413	382	8	
Intermodal [a]	749	805	(7)	1,483	1,562	(5)	
Premium	962	997	(4)	1,896	1,944	(2)	
Total	2,027	2,065	(2)%	4,004	4,071	(2)%	

	Thre	ee M	lonths End	ded	Six	(Мо	nths Ende	∍d
	June 30,					Jι	ıne 30,	
Average Revenue per Car	2023		2022	Change	2023		2022	Change
Grain & grain products	\$ 4,527	\$	4,451	2%	\$ 4,598	\$	4,357	6%
Fertilizer	3,830		3,437	11	3,978		3,701	7
Food & refrigerated	5,740		5,770	(1)	5,851		5,703	3
Coal & renewables	2,107		2,426	(13)	2,228		2,340	(5)
Bulk	3,568		3,642	(2)	3,657		3,574	2
Industrial chemicals & plastics	3,336		3,455	(3)	3,368		3,351	1
Metals & minerals	2,677		2,755	(3)	2,760		2,710	2
Forest products	6,337		6,128	3	6,360		5,898	8
Energy & specialized markets	4,388		4,161	5	4,398		4,189	5
Industrial	3,646		3,674	(1)	3,701		3,626	2
Automotive	2,928		2,919	-	2,935		2,780	6
Intermodal [a]	1,471		1,711	(14)	1,521		1,641	(7)
Premium	1,794		1,943	(8)	1,829		1,864	(2)
Average	\$ 2,748	\$	2,830	(3)%	\$ 2,804	\$	2,771	1%

[[]a] For intermodal shipments each container or trailer equals one carload.

Bulk – Bulk includes shipments of grain and grain products, fertilizer, food and refrigerated, and coal and renewables. Freight revenues from bulk shipments decreased in the second quarter of 2023 compared to 2022 due to lower fuel surcharge revenues, volume declines, and negative mix of traffic from decreased food and refrigerated shipments, partially offset by core pricing gains. Volume declined 1% in the second quarter of 2023 compared to 2022 driven by decreased export potash shipments due to a customer outage and fewer export grain shipments driven by higher prices making the grain less competitive in the world market, partially offset by strong markets in domestic grain and renewable diesel feedstocks. Year-to-date, freight revenues increased slightly compared to the same period in 2022 due to core pricing gains and higher fuel surcharge revenues, partially offset by volume declines and negative mix of traffic from decreased food and refrigerated shipments. Volumes for coal and renewable shipments and food and refrigerated were negatively impacted by outages and service challenges due to repeated snow events in Wyoming and flooding in California in the first quarter of 2023.

Industrial – Industrial includes shipments of industrial chemicals and plastics, metals and minerals, forest products, and energy and specialized markets. Freight revenues from industrial shipments were flat in the second quarter of 2023 compared to 2022 due to negative mix of traffic from decreased lumber shipments and increased short haul rock shipments and lower fuel surcharge revenues, partially offset by core pricing gains and volume increases. Volume increased 1% in the second quarter of 2023 compared to 2022. We saw growth in metals and minerals due to strong demand for rock and sand. That growth was partially offset by decreases in forest products due to the softening housing market and fewer shipments of brown paper as demand for non-durable goods declined. Year-to-date, freight revenues increased compared to the same period in 2022 due to core pricing gains and higher fuel surcharge revenues, partially offset by negative mix of traffic from decreased lumber shipments and increased short haul rock shipments.

Premium – Premium includes shipments of finished automobiles, automotive parts, and merchandise in intermodal containers, both domestic and international. Premium freight revenues decreased in the second quarter and six-month period of 2023 compared to 2022 due to lower fuel surcharge revenues and volume declines, partially offset by core pricing gains. Intermodal shipments declined 7% and 5% in the second quarter and year-to-date periods, respectively, compared to 2022 as high inventories and inflationary pressures impacted consumer demand, partially offset by a domestic contract win. Automotive shipments increased 11% and 8% in the second quarter and six-month periods of 2023, respectively, compared to the same periods in 2022 driven by increased production as dealers replenish inventories.

Mexico Business – Each of our commodity groups includes revenues from shipments to and from Mexico. Revenues from Mexico business increased 1% to \$689 million in the second quarter of 2023 compared to 2022 driven by a 4% volume increase, partially offset by lower fuel surcharge revenues. Volume increases were driven by higher automotive and intermodal shipments. Year-to-date, revenues increased 5% driven by a 2% increase in volume and 3% increase in average revenue per car.

Operating Expenses

	Three Months Ended June 30,						Six Months Ended June 30,			
Millions		2023		2022	Change	2023		2022	Change	
Compensation and benefits	\$	1,269	\$	1,092	16% \$	2,448	\$	2,193	12%	
Fuel		664		940	(29)	1,430		1,654	(14)	
Purchased services and materials		650		622	5	1,303		1,183	10	
Depreciation		577		559	3	1,149		1,114	3	
Equipment and other rents		248		230	8	483		445	9	
Other		351		331	6	708		668	6	
Total	\$	3,759	\$	3,774	-% \$	7,521	\$	7,257	4%	

Operating expenses decreased slightly in the second quarter of 2023 compared to 2022 driven by lower fuel prices and volume related costs, offset by inflation, the ratification charge, and increased workforce levels. Year-to-date, operating expenses increased \$264 million driven by inflation; operational challenges, including additional costs related to weather; increased workforce levels; and the ratification charge, partially offset by lower fuel prices and lower volume related costs.

Compensation and Benefits – Compensation and benefits include wages, payroll taxes, health and welfare costs, pension costs, and incentive costs. For the second quarter of 2023, expenses increased 16% compared to 2022 due to the ratification charge, wage inflation, and increase in employee levels. For the year-to-date period of 2023 compared to 2022, expenses increased 12% driven by wage inflation, increased employee levels, and the ratification charge. The year-to-date employee level increase of 4% includes a 6% increase in train, engine, and yard employees to support our training pipeline and address operational challenges.

Fuel – Fuel includes locomotive fuel and gasoline for highway and non-highway vehicles and heavy equipment. Fuel expense decreased in the second quarter and six-month periods of 2023 compared to the same periods in 2022 driven by a decrease in locomotive diesel fuel prices and a 1% decrease in gross ton-miles, partially offset by a 1% increase in the fuel consumption rate, computed as gallons of fuel consumed divided by gross ton-miles in thousands. Locomotive diesel fuel prices averaged \$2.86 and \$4.03 per gallon (including taxes and transportation costs) in the second quarter of 2023 and 2022, respectively. Year-to-date, locomotive diesel fuel prices averaged \$3.04 compared to the \$3.48 per gallon in the same period of 2022.

Purchased Services and Materials – Expense for purchased services and materials includes the costs of services purchased from outside contractors and other service providers (including equipment maintenance and contract expenses incurred by our subsidiaries for external transportation services); materials used to maintain the Railroad's lines, structures, and equipment; costs of operating facilities jointly used by UPRR and other railroads; transportation and lodging for train crew employees; trucking and contracting costs for intermodal containers; leased automobile maintenance expenses; and tools and supplies. Purchased services and materials increased 5% in the second quarter of 2023 compared to 2022 primarily due to inflation, partially offset by decreased drayage cost incurred at one of our subsidiaries. In the year-to-date period of 2023, purchased services and materials increased 10% compared to 2022 primarily due to higher locomotive maintenance expenses due to inflation and a larger active fleet to assist in recovering the network, partially offset by decreased drayage cost incurred at one of our subsidiaries.

Depreciation – The majority of depreciation relates to road property, including rail, ties, ballast, and other track material. Depreciation expense was up 3% for the second quarter and year-to-date periods of 2023 compared to the same periods in 2022.

Equipment and Other Rents – Equipment and other rents expense primarily includes rental expense that the Railroad pays for freight cars owned by other railroads or private companies; freight car, intermodal, and locomotive leases; and office and other rent expense, offset by equity income from certain equity method investments. Equipment and other rents expense increased 8% and 9% in the second quarter and year-to-date periods of 2023, respectively, compared to 2022 driven by inflation, partially offset by lower volume. With improved network fluidity in the second quarter of 2023, cycle times improved and lowered rent expense, whereas, in the year-to-date period, cycle times were elongated due to operational challenges.

Other – Other expenses include state and local taxes; freight, equipment, and property damage; utilities; insurance; personal injury; environmental remediation; employee travel; telephone and cellular; computer software; bad debt; and other general expenses. Other costs increased 6% in both the second quarter and six-month periods of 2023 compared to 2022 driven by higher environmental remediation costs.

Non-Operating Items

	Three Months Ended June 30,						Six Months Ended June 30,			
Millions	 2023		2022	Change	2023		2022	Change		
Other income, net	\$ 93	\$	163	(43)% \$	277	\$	210	32%		
Interest expense	(339)		(316)	7	(675)		(623)	8		
Income tax expense	(389)		(507)	(23)	(901)		(994)	(9)		

Other Income, net – Other income decreased in the second quarter of 2023 compared to 2022 driven by lower gains from real estate sales. Real estate sales in the second quarter of 2022 include a \$79 million gain from a land sale to the Illinois State Toll Highway Authority. Year-to-date, other income increased due to a one-time \$107 million real estate transaction which was partially offset by lower gains from real estate sales.

Interest Expense – Interest expense increased in the second quarter and year-to-date periods of 2023 compared to the same periods of 2022 due to an increased weighted-average debt level. In both periods of 2023, the weighted-average debt level was \$33.5 billion compared to \$32.1 billion and \$31.5 billion in the second quarter and year-to-date periods of 2022, respectively. The effective interest rate was 4.0% in all periods.

Income Tax Expense – Income tax expense decreased in both the second quarter and year-to-date periods of 2023 compared to 2022, driven by lower pre-tax income and deferred tax adjustments. In the second quarter of 2023 and 2022, the state of Nebraska enacted legislation to reduce its corporate income tax rate for future years resulting in a reduction of our deferred tax expense of \$73 million and \$55 million, respectively. Our effective tax rates for year-to-date 2023 and 2022 were 22.0% and 22.3%, respectively.

OTHER OPERATING/PERFORMANCE AND FINANCIAL STATISTICS

We report a number of key performance measures weekly to the Surface Transportation Board (STB). We provide this data on our website at www.up.com/investor/aar-stb_reports/index.htm.

Operating/Performance Statistics

Management continuously monitors these key operating metrics to evaluate our operational efficiency and asset utilization in striving to provide a consistent, reliable service product to our customers.

Railroad performance measures are included in the table below:

	Three	Months En	ded	Six N	Nonths End	ded	
		June 30,			June 30,		
	2023	2022	Change	2023	2022	Change	
Gross ton-miles (GTMs) (billions)	207.6	209.8	(1)%	414.3	419.5	(1)%	
Revenue ton-miles (billions)	101.5	103.4	(2)	205.3	210.6	(2)	
Freight car velocity (daily miles per car) [a]	202	187	8	199	192	4	
Average train speed (miles per hour) [a]	24.1	23.6	2	24.1	23.9	1	
Average terminal dwell time (hours) [a]	23.3	24.6	(5)	23.6	24.3	(3)	
Locomotive productivity (GTMs per horsepower day)	126	123	2	125	126	(1)	
Train length (feet)	9,316	9,439	(1)	9,238	9,321	(1)	
Intermodal car trip plan compliance (%) [b]	79	62	17pts	76	67	9pts	
Manifest/Automotive car trip plan compliance (%) [b]	64	56	8pts	63	59	4pts	
Workforce productivity (car miles per employee)	983	1,034	(5)	987	1,045	(6)	
Total employees (average)	32,060	30,715	4	31,766	30,452	4	
Operating ratio (%)	63.0	60.2	2.8pts	62.6	59.8	2.8pts	

[[]a] As reported to the STB.

Gross and Revenue Ton-Miles – Gross ton-miles are calculated by multiplying the weight of loaded and empty freight cars by the number of miles hauled. Revenue ton-miles are calculated by multiplying the weight of freight by the number of tariff miles. Gross ton-miles and revenue ton-miles decreased 1% and 2%, respectively, during both the second quarter and year-to-date periods of 2023 compared to 2022, driven by a 2% decline in carloadings in both periods. Changes in commodity mix drove the variances in year-over-year decreases between gross ton-miles, revenue ton-miles, and carloads (higher decreases in bulk shipments, which are generally heavier).

Freight Car Velocity – Freight car velocity measures the average daily miles per car on our network. The two key drivers of this metric are the speed of the train between terminals (average train speed) and the time a rail car spends at the terminals (average terminal dwell time). Both average train speed and average terminal dwell time improved in the second quarter of 2023 compared to 2022 as last year we experienced congestion across our system. As network fluidity improved, freight car velocity increased. These metrics also improved year-to-date despite operational challenges caused by weather in the first quarter of 2023.

Locomotive Productivity – Locomotive productivity is gross ton-miles per average daily locomotive horsepower available. Locomotive productivity increased in the second quarter of 2023 compared to the same periods in 2022 driven by improved network fluidity. We stored locomotives in the second quarter of 2023, reducing our active fleet size by 4% since the end of the first quarter of 2023. Year-to-date, locomotive productivity declined as improvement in the second quarter didn't fully offset increased average active fleet size in the first quarter as resources were deployed to alleviate operational challenges caused by weather.

[[]b] Methodology used to report (described below) is not comparable with the reporting to the STB under docket number EP 770.

Train Length – Train length is the average maximum train length on a route measured in feet. Our train length decreased 1% in both the second quarter and six-month periods of 2023 compared to the same periods of 2022, due to a 2% decrease in carloadings in both periods driven by declines in intermodal shipments of 7% and 5% in the second quarter and six-month periods of 2023, respectively, compared to the same periods of 2022.

Car Trip Plan Compliance – Car trip plan compliance is the percentage of cars delivered on time in accordance with our original trip plan. Our network car trip plan compliance is broken into the intermodal and manifest/automotive products. Intermodal car trip plan compliance improved 17 points and 9 points, respectively, in the second quarter and year-to-date periods of 2023 compared to 2022. Manifest/automotive car trip plan compliance improved 8 points and 4 points, respectively, in the second quarter and year-to-date periods of 2023 compared to 2022. Improved network fluidity, as evidenced by faster freight car velocity, faster train speed, and lower terminal dwell drove these improvements.

Workforce Productivity – Workforce productivity is average daily car miles per employee. Workforce productivity decreased 5% and 6%, respectively, in the second quarter and year-to-date period of 2023 as average daily car miles decreased and employees increased compared to 2022. The 4% increase in employee levels in both periods was driven by an increase in craft professionals. We aggressively hired train, engine, and yard employees to support our training pipeline. In addition, mechanical craft professionals increased year-over-year to maintain our larger active fleet.

Operating Ratio – Operating ratio is our operating expenses reflected as a percentage of operating revenues. Our second quarter of 2023 operating ratio of 63.0% deteriorated 2.8 points compared to 2022 and our year-to-date operating ratio of 62.6% deteriorated 2.8 points compared to 2022 mainly due to inflation, excess network costs, negative mix of traffic, the ratification charge, and other cost increases, partially offset by lower fuel prices and core pricing gains.

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Debt /	Net	Incon	ne
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Millions, Except Ratios	Jun. 30,	Dec. 31,
for the Trailing Twelve Months Ended [a]	2023	2022
Debt	\$ 33,302	\$ 33,326
Net income	6,732	6,998
Debt / net income	4.9	4.8
Adjusted Debt / Adjusted EBITDA		
Millions, Except Ratios	Jun. 30,	Dec. 31,
for the Trailing Twelve Months Ended [a]	2023	2022
Net income	\$ 6,732	\$ 6,998
Add:		
Income tax expense	1,981	2,074
Depreciation	2,281	2,246
Interest expense	1,323	1,271
EBITDA	\$ 12,317	\$ 12,589
Adjustments:		
Other income, net	(493)	(426)
Interest on operating lease liabilities [b]	53	54
Adjusted EBITDA	\$ 11,877	\$ 12,217
Debt	\$ 33,302	\$ 33,326
Operating lease liabilities	1,563	1,631
Unfunded pension and OPEB, net of tax cost of \$0 and \$0 [c]	-	-
Adjusted debt	\$ 34,865	\$ 34,957

[[]a] The trailing twelve months income statement information ended June 30, 2023, is recalculated by taking the twelve months ended December 31, 2022, subtracting the six months ended June 30, 2022, and adding the six months ended June 30, 2023.

Adjusted debt / adjusted EBITDA

[[]b] Represents the hypothetical interest expense we would incur (using the incremental borrowing rate) if the property under our operating leases were owned or accounted for as finance leases.

[[]c] OPEB = other post retirement benefits

Adjusted debt to adjusted EBITDA (earnings before interest, taxes, depreciation, amortization, and adjustments for other income and interest on present value of operating leases) is considered a non-GAAP financial measure by SEC Regulation G and Item 10 of SEC Regulation S-K and may not be defined and calculated by other companies in the same manner. We believe this measure is important to management and investors in evaluating the Company's ability to sustain given debt levels (including leases) with the cash generated from operations. In addition, a comparable measure is used by rating agencies when reviewing the Company's credit rating. Adjusted debt to adjusted EBITDA should be considered in addition to, rather than as a substitute for, other information provided in accordance with GAAP. The most comparable GAAP measure is debt to net income ratio. The tables above provide a reconciliation from net income to adjusted EBITDA, debt to adjusted debt, and debt to net income to adjusted debt to adjusted EBITDA. At June 30, 2023, and December 31, 2022, the incremental borrowing rate on operating leases was 3.4% and 3.3%, respectively.

LIQUIDITY AND CAPITAL RESOURCES

Financial Condition

Cash Flows

Millions, for the Six Months Ended June 30,	2023	2022
Cash provided by operating activities	\$ 3,858	\$ 4,167
Cash used in investing activities	(1,674)	(1,540)
Cash used in financing activities	(2,328)	(2,796)
Net change in cash, cash equivalents and restricted cash	\$ (144)	\$ (169)

Operating Activities

Cash provided by operating activities decreased in the first six months of 2023 compared to the same period of 2022 due to \$445 million of payments related to the settlement of our labor union agreements.

Investing Activities

Cash used in investing activities increased in the first six months of 2023 compared to the same period of 2022 driven by lower proceeds from asset sales.

The table below details cash capital investments:

Millions, for the Six Months Ended June 30,	2023	2022
Rail and other track material	\$ 287	\$ 263
Ties	239	236
Ballast	99	98
Other [a]	330	290
Total road infrastructure replacements	955	887
Line expansion and other capacity projects	57	159
Commercial facilities	162	89
Total capacity and commercial facilities	219	248
Locomotives and freight cars [b]	302	345
Technology and other	131	165
Total cash capital investments [c]	\$ 1,607	\$ 1,645

- [a] Other includes bridges and tunnels, signals, other road assets, and road work equipment.
- [b] Locomotives and freight cars include early lease buyouts of \$14 million in 2023 and \$46 million in 2022.
- [c] Weather-related damages for the six months ended June 30, 2023 and 2022, are immaterial.

Capital Plan

In 2023, we expect our capital plan to be approximately \$3.6 billion, up 6% from 2022, as we make investments to support our growth strategy. We plan to continue to harden our infrastructure, replace older assets, and improve the safety and resiliency of the network. In addition, the plan includes investments in growth-related projects to drive more carloads to the network, certain ramps to efficiently handle volumes from new and existing intermodal customers, continuous modernization of our locomotive fleet, and projects intended to improve operational efficiency. The capital plan may be revised if business conditions warrant or if new laws or regulations affect our ability to generate sufficient returns on these investments.

Financing Activities

Cash used in financing activities decreased in the first six months of 2023 compared to the same period of 2022 driven by a decrease in share repurchases, partially offset by less debt issued.

See Note 13 of the Condensed Consolidated Financial Statements for a description of all our outstanding financing arrangements and significant new borrowings and Note 15 of the Condensed Consolidated Financial Statements for a description of our share repurchase programs.

Free Cash Flow – Free cash flow is defined as cash provided by operating activities less cash used in investing activities and dividends paid. Cash flow conversion rate is cash provided by operating activities less cash used for capital investments as a ratio of net income.

Free cash flow and cash flow conversion rate are not considered financial measures under GAAP by SEC Regulation G and Item 10 of SEC Regulation S-K and may not be defined and calculated by other companies in the same manner. We believe free cash flow and cash flow conversion rate are important to management and investors in evaluating our financial performance and measures our ability to generate cash without additional external financing. Free cash flow and cash flow conversion rate should be considered in addition to, rather than as a substitute for, cash provided by operating activities.

The following table reconciles cash provided by operating activities (GAAP measure) to free cash flow (non-GAAP measure):

Millions, for the Six Months Ended June 30,	2023	2022
Cash provided by operating activities	\$ 3,858	\$ 4,167
Cash used in investing activities	(1,674)	(1,540)
Dividends paid	(1,588)	(1,556)
Free cash flow	\$ 596	\$ 1,071

The following table reconciles cash provided by operating activities (GAAP measure) to cash flow conversion rate (non-GAAP measure):

Millions, for the Six Months Ended June 30,		2023	2022
Cash provided by operating activities	\$	3,858	\$ 4,167
Cash used in capital investments		(1,607)	(1,645)
Total (a)	\$	2,251	\$ 2,522
Net income (b)	\$	3,199	\$ 3,465
Cash flow conversion rate (a/b)	conversion rate (a/b) 70%		73%

Current Liquidity Status

We are continually evaluating our financial condition and liquidity. We analyze a wide range of economic scenarios and the impact on our ability to generate cash. These analyses inform our liquidity plans and activities outlined below and indicate we have sufficient borrowing capacity to sustain an extended period of lower volumes.

During the second quarter of 2023, we generated \$2.0 billion of cash provided by operating activities, paid our quarterly dividend, repurchased \$121 million worth of shares under our share repurchase programs, and drew \$400 million on the Receivables Facility. On June 30, 2023, we had \$830 million of cash and cash equivalents, \$2.0 billion of credit available under our revolving credit facility, and \$400 million undrawn on the Receivables Facility. We have been, and we expect to continue to be, in compliance with our debt covenants.

As described in the notes to the Condensed Consolidated Financial Statements and as referenced in the table below, we have contractual obligations that may affect our financial condition. Based on our assessment of the underlying provisions and circumstances of our contractual obligations, other than the risks that we and other similarly situated companies face with respect to the condition of the capital markets, as of the date of this filing, there is no known trend, demand, commitment, event, or uncertainty that is reasonably likely to occur that would have a material adverse effect on our consolidated results of operations, financial condition, or liquidity. In addition, our commercial obligations, financings, and commitments are customary transactions that are like those of other comparable corporations, particularly within the transportation industry.

The following table identifies material obligations as of June 30, 2023:

			Jul. 1	I. 1Payments Due by Dec. 31,							
			through								
Contractual Obligations		E	Dec. 31,								After
Millions	Total		2023		2024		2025	2026	2027		2027
Debt [a]	\$ 61,888	\$	972	\$	2,610	\$	2,991	\$ 2,617	\$ 2,348	\$	50,350
Purchase obligations [b]	3,027		486		902		869	308	207		255
Operating leases [c]	1,729		125		343		346	273	216		426
Other post retirement benefits [d]	374		23		40		40	40	39		192
Finance lease obligations [e]	202		23		61		42	35	30		11
Total contractual obligations	\$ 67,220	\$	1,629	\$	3,956	\$	4,288	\$ 3,273	\$ 2,840	\$	51,234

- [a] Excludes finance lease obligations of \$182 million as well as unamortized discount and deferred issuance costs of (\$1,759) million. Includes an interest component of \$27,009 million.
- [b] Purchase obligations include locomotive maintenance contracts; purchase commitments for ties, ballast, and rail; and agreements to purchase other goods and services.
- [c] Includes leases for locomotives, freight cars, other equipment, and real estate. Includes an interest component of \$166 million.
- [d] Includes estimated other post retirement, medical, and life insurance payments and payments made under the unfunded pension plan for the next ten years.
- [e] Represents total obligations, including interest component of \$20 million.

OTHER MATTERS

Asserted and Unasserted Claims - See Note 14 to the Condensed Consolidated Financial Statements.

Indemnities – See Note 14 to the Condensed Consolidated Financial Statements.

CAUTIONARY INFORMATION

Certain statements in this Form 10-Q, and statements in other reports or information filed or to be filed with the SEC (as well as information included in oral statements or other written statements made or to be made by us), are, or will be, forward-looking statements as defined by the Securities Act of 1933 and the Securities Exchange Act of 1934. Forward-looking statements may be identified by their use of forward-looking terminology, such as "believes," "expects," "may," "should," "would," "will," "intends," "plans," "estimates," "anticipates," "projects" and similar words, phrases, or expressions. Forward-looking statements and information also include any other statements or information in this report (including information incorporated herein by reference) regarding: potential impacts of public health crises, including pandemics, epidemics, and the outbreak of other contagious diseases, such as the coronavirus and its variant strains (COVID); the Russia Ukraine conflict and its impact on our business operations, financial results, liquidity, and financial position, and on the world economy (including our customers, employees, and supply chains), including as a result of fluctuations in volume and carloadings; expectations as to general macroeconomic conditions, including slowdowns and recessions, domestically or internationally, and future volatility in interest rates and fuel prices; closing of customer manufacturing, distribution or production facilities; expectations as to operational or service improvements; expectations as to hiring challenges; availability of employees; expectations regarding the effectiveness of steps taken or to be taken to improve operations, service, infrastructure improvements, and transportation plan modifications; expectations as to cost savings, revenue growth, and earnings; the time by which goals, targets, or objectives will be achieved; projections, predictions, expectations, estimates, or forecasts as to our business, financial, and operational results, future economic performance, and planned capital investments; proposed new products and services; estimates of costs relating to environmental remediation and restoration; estimates and expectations regarding tax matters; expectations that claims, litigation, environmental costs, commitments, contingent liabilities, labor negotiations or agreements, cyberattacks, or other matters will not have a material adverse effect on our consolidated results of operations, financial condition, or liquidity; and any other statements concerning matters that are not historical facts.

Forward-looking statements should not be read as a guarantee of future performance, results, or outcomes, and will not necessarily be accurate indications of the times that, or by which, such performance, results, or outcomes will be achieved, if ever. Forward-looking statements and information are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statements and information. Forward-looking statements and information reflect the good faith consideration by management of currently available information, and may be based on underlying assumptions believed to be reasonable under the circumstances. However, such information and assumptions (and, therefore, such forward-looking statements and information) are or may be subject to variables or unknown or unforeseeable events or circumstances over which management has little or no influence or control, and many of these risks and uncertainties are currently amplified by and may continue to be amplified by, or in the future may be amplified by, among other things, current macroeconomic and geopolitical conditions.

The Risk Factors in Item 1A of our 2022 Annual Report on Form 10-K, filed February 10, 2023, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in the forward-looking statements or information. To the extent circumstances require or we deem it otherwise necessary, we will update or amend these risk factors in a Form 10-Q, Form 8-K, or subsequent Form 10-K. All forward-looking statements are qualified by, and should be read in conjunction with, these Risk Factors. Forward-looking statements speak only as of the date the statement was made. We assume no obligation to update forward looking information to reflect actual results, changes in assumptions, or changes in other factors affecting forward-looking information. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect thereto or with respect to other forward-looking statements.

AVAILABLE INFORMATION

Our Internet website is www.up.com. We make available free of charge on our website (under the "Investors" caption link) our Annual Reports on Form 10-K; our Quarterly Reports on Form 10-Q; our current reports on Form 8-K; our proxy statements; Forms 3, 4, and 5, filed on behalf of directors and executive officers; and amendments to such reports filed or furnished pursuant to the Securities Exchange Act of 1934, as amended (the Exchange Act). We provide these reports and statements as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. We also make available on our website previously filed SEC reports and exhibits via a link to EDGAR on the SEC's Internet site at www.sec.gov. We provide these previously filed reports as a convenience and their contents reflect only information that was true and correct as of the date of the report. We assume no obligation to update this historical information. Additionally, our corporate governance materials, including By-Laws, Board Committee charters, governance guidelines and policies, and codes of conduct and ethics for directors, officers, and employees are available on our website. From time to time, the corporate governance materials on our website may be updated as necessary to comply with rules issued by the SEC and the New York Stock Exchange or as desirable to promote the effective and efficient governance of our Company. Any security holder wishing to receive, without charge, a copy of any of our SEC filings or corporate governance materials should send a written request to: Secretary, Union Pacific Corporation, 1400 Douglas Street, Omaha, NE 68179.

References to our website address in this report, including references in Management's Discussion and Analysis of Financial Condition and Results of Operations, Item 2, are provided as a convenience and do not constitute, and should not be deemed, an incorporation by reference of the information contained on, or available through, the website. Therefore, such information should not be considered part of this report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There were no material changes to the Quantitative and Qualitative Disclosures About Market Risk previously disclosed in our 2022 Annual Report on Form 10-K.

Item 4. Controls and Procedures

As of the end of the period covered by this report, the Corporation carried out an evaluation, under the supervision and with the participation of the Corporation's management, including the Corporation's Chief Executive Officer (CEO) and Executive Vice President and Chief Financial Officer (CFO), of the effectiveness of the design and operation of the Corporation's disclosure controls and procedures pursuant to Exchange Act Rules 13a-15 and 15d-15. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Based upon that evaluation, the CEO and the CFO concluded that, as of the end of the period covered by this report, the Corporation's disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified by the SEC, and that such information is accumulated and communicated to management, including the CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Additionally, the CEO and CFO determined that there were no changes to the Corporation's internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) during the last fiscal quarter that materially affected, or are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we are involved in legal proceedings, claims, and litigation that occur in connection with our business. We routinely assess our liabilities and contingencies in connection with these matters based upon the latest available information and, when necessary, we seek input from our third-party advisors when making these assessments. Consistent with SEC rules and requirements, we describe below material pending legal proceedings (other than ordinary routine litigation incidental to our business), material proceedings known to be contemplated by governmental authorities, other proceedings arising under federal, state, or local environmental laws and regulations (including governmental proceedings involving potential fines, penalties, or other monetary sanctions in excess of \$1,000,000), and such other pending matters that we may determine to be appropriate.

Environmental Matters

We receive notices from the U.S. Environmental Protection Agency (EPA) and state environmental agencies alleging that we are or may be liable under federal or state environmental laws for remediation costs at various sites throughout the U.S., including sites on the Superfund National Priorities List or state superfund lists. We cannot predict the ultimate impact of these proceedings and suits because of the number of potentially responsible parties involved, the degree of contamination by various wastes, the scarcity and quality of volumetric data related to many of the sites, and the speculative nature of remediation costs.

Information concerning environmental claims and contingencies and estimated remediation costs is set forth in Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Estimates – Environmental, Item 7, and Note 17 of the Consolidated Financial Statements and Supplementary Data, Item 8, of our 2022 Annual Report on Form 10-K.

Item 1A. Risk Factors

For a discussion of our potential risks and uncertainties, see the risk factors disclosed in our Form 10-K for the year ended December 31, 2022. These risks could materially and adversely affect our business, financial condition, results of operations (including revenues and profitability), and/or stock price. Our business also could be affected by risks that we are not presently aware of or that we currently consider immaterial to our operations.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Purchases of Equity Securities – The following table presents common stock repurchases during each month for the second quarter of 2023:

	Total Number of	Total Number of Shares Purchased as Part of a Maximum Number of Shar					
	Shares						
Period	Purchased [a]	Paid Pe	er Share	Program	Under Current Authority [b]		
Apr. 1 through Apr. 30	486,869	\$	199.77	479,977	80,518,631		
May. 1 through May. 31	126,843		198.96	126,604	80,392,027		
Jun. 1 through Jun. 30	132		198.26	-	80,392,027		
Total	613,844	\$	199.60	606,581	N/A		

[[]a] Total number of shares purchased during the quarter includes 7,263 shares delivered or attested to UPC by employees to pay stock option exercise prices and satisfy tax withholding obligations for stock option exercises or vesting of retention units or retention shares.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not Applicable.

Item 5. Other Information

On May 22, 2023, Jennifer L. Hamann, Executive Vice President and Chief Financial Officer, adopted a trading plan intended to satisfy Rule 10b5-1(c) to sell up to 2,000 shares of Union Pacific Corporation common stock between August 23, 2023, and January 31, 2024, subject to certain conditions.

On May 22, 2023, Kenny G. Rocker, Executive Vice President – Marketing and Sales for Union Pacific Railroad Company, adopted a trading plan intended to satisfy Rule 10b5-1(c) to sell up to 9,919 shares of Union Pacific Corporation common stock, of which 4,180 are to be acquired upon the exercise of vested stock options, between August 23, 2023, and January 31, 2024, subject to certain conditions.

[[]b] Effective April 1, 2022, our Board of Directors authorized the repurchase of up to 100 million shares of our common stock by March 31, 2025. These repurchases may be made on the open market or through other transactions. Our management has sole discretion with respect to determining the timing, manner, and amount of these transactions.

Item 6. Exhibits

Exhibit No. Description

Filed with this Statement

- 31(a) Certifications Pursuant to Rule 13a-14(a), of the Exchange Act, as Adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 Lance M. Fritz.
- 31(b) Certifications Pursuant to Rule 13a-14(a), of the Exchange Act, as Adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 Jennifer L. Hamann.
- 32 <u>Certifications Pursuant to 18 U.S.C. Section 1350, as Adopted pursuant to Section 906 of the Sarbanes-Oxley</u>
 Act of 2002 Lance M. Fritz and Jennifer L. Hamann.
- The following financial and related information from Union Pacific Corporation's Quarterly Report on Form 10-Q for the period ended June 30, 2023 (filed with the SEC on July 26, 2023), formatted in Inline Extensible Business Reporting Language (iXBRL) includes (i) Condensed Consolidated Statements of Income for the periods ended June 30, 2023 and 2022, (ii) Condensed Consolidated Statements of Comprehensive Income for the periods ended June 30, 2023 and 2022, (iii) Condensed Consolidated Statements of Financial Position at June 30, 2023, and December 31, 2022, (iv) Condensed Consolidated Statements of Cash Flows for the periods ended June 30, 2023 and 2022, (v) Condensed Consolidated Statements of Changes in Common Shareholders' Equity for the periods ended June 30, 2023 and 2022, and (vi) the Notes to the Condensed Consolidated Financial Statements.
- 104 Cover Page Interactive Data File, formatted in Inline XBRL (contained in Exhibit 101).

Incorporated by Reference

- 3(a) Restated Articles of Incorporation of UPC, as amended and restated through June 27, 2011, and as further amended May 15, 2014, are incorporated herein by reference to Exhibit 3(a) to the Corporation's Quarterly Report on Form 10-Q for the guarter ended June 30, 2014.
- 3(b) <u>By-Laws of UPC, as amended, effective November 19, 2015, are incorporated herein by reference to Exhibit 3.2 to the Corporation's Current Report on Form 8-K dated November 19, 2015.</u>

SIGNATURES

Pursuant to the requirements 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.

Dated: July 26, 2023

UNION PACIFIC CORPORATION (Registrant)

By /s/ Jennifer L. Hamann

Jennifer L. Hamann Executive Vice President and Chief Financial Officer (Principal Financial Officer)

By /s/ Todd M. Rynaski

Todd M. Rynaski Senior Vice President and Chief Accounting, Risk, and Compliance Officer (Principal Accounting Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

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

Date: July 26, 2023

/s/ Lance M. Fritz Lance M. Fritz

Chairman, President, and Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

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

Date: July 26, 2023

/s/ Jennifer L. Hamann
Jennifer L. Hamann
Executive Vice President and
Chief Financial Officer

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

In connection with the accompanying quarterly report of Union Pacific Corporation (the Corporation) on Form 10-Q for the period ending June 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Lance M. Fritz, Chairman, President, and Chief Executive Officer of the Corporation, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 that:

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

By: /s/ Lance M. Fritz
Lance M. Fritz
Chairman, President, and
Chief Executive Officer
Union Pacific Corporation

July 26, 2023

A signed original of this written statement required by Section 906 has been provided to the Corporation and will be retained by the Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

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

In connection with the accompanying quarterly report of Union Pacific Corporation (the Corporation) on Form 10-Q for the period ending June 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the Report), I, Jennifer L. Hamann, Executive Vice President and Chief Financial Officer of the Corporation, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 that:

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

By: /s/ Jennifer L. Hamann
Jennifer L. Hamann
Executive Vice President and
Chief Financial Officer
Union Pacific Corporation

July 26, 2023

A signed original of this written statement required by Section 906 has been provided to the Corporation and will be retained by the Corporation and furnished to the Securities and Exchange Commission or its staff upon request.