INDEPENDENT CASE STUDY | PUBLIC INFORMATION ONLY

Union Pacific / Norfolk Southern

The first transcontinental railroad: is it worth the price, and is the spread mispriced?

M&A and merger-arbitrage assessment of Union Pacific's ~$85B acquisition of Norfolk Southern (1.0 UNP share + $88.82 cash per NSC share)

Figures in US$ unless noted

Deal terms, valuation, synergies, accretion, financing, STB review, spread, scenarios and recommendation

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Not prepared for, reviewed by or affiliated with Union Pacific, Norfolk Southern, their advisors, or any employer or client. Not investment advice.

A sound deal for UNP holders if revenue synergies arrive, and a spread that prices only a 25% chance of closing

View: qualified support for the merger on its merits. Arb: long NSC / short 1.0 UNP, sized so that a break costs 0.5% of NAV.

25%

Market-implied chance of closing

Versus our 55%. Effective break $315.52 incl. the $2.5B reverse fee; forward to a 31-Oct-27 close.

1.53x

Net synergy NPV / premium

$19.3B NPV of UP management's $2.0B net synergies vs a $12.6B premium (peer-drift basis).

+9.4%

Year-3 EPS accretion (2030E)

−1.2% in year 1 and +5.2% in year 2; −1.8% in year 3 with no synergies.

Full price, real logic.

Deal value today is $375.25 per NSC share (EV $100B, 17.7x LTM EBITDA): above every rail precedent except CP/KCS (19.5x). Single-line coast-to-coast service is the reason to pay it.

UNP holders gain $6.9B ($11.56/sh).

Break-even needs ~$1.1B of net run-rate synergies. The $1.0B of cost synergies alone (NPV $8.8B) falls short, so value depends on revenue synergies.

Regulation is the swing factor.

First Class I merger under the 2001 rules, which require applicants to enhance competition. Comments due 18-Nov-2026; final briefs 28-May-2027; decision within 90 days after.

The arb pays about 3:1.

Long 1 NSC / short 1 UNP: +$51.24 if it closes, −$17.08 if it breaks. Breakeven 25%. Expected +$20.50/sh (6.3% of notional).

Source: Valuation date: close of 14-Oct-2026 (UNP $286.43, NSC $323.73). Model (model/UNP_NSC_merger_model.xlsx); merger agreement 28-Jul-2025; UNP 424B3 (Sep-2025); STB Docket FD 36873 (Decision No. 30, 18-Aug-2026); Yahoo Finance closes 14-Oct-2026.

Transaction overview: 1.0 UNP share plus $88.82 cash, worth $375.25 per NSC share today

Worth $320 at signing (UNP unaffected $231.18), a 25% premium to NSC's 30-day VWAP. UNP is up 24% since, lifting the value.

Term	Detail
Consideration	1.0 UNP share + $88.82 cash per NSC share. 72% stock at signing; 76% at today's UNP price
Value per NSC share	$320.00 at signing (+22.9% vs $260.32 unaffected close, 16-Jul-2025); $375.25 today (+44.1%)
Size	Equity $72.1B / EV $85.0B at signing; equity $84.6B / EV $100.1B today
Shares / ownership	225.4M UNP shares; NSC holders own ~27.5% of the combined company (company: ~27%)
Termination fees	$2.5B reverse fee paid by UNP on regulatory failure at the End Date or a final adverse order ($11.13/NSC sh); $2.5B paid by NSC on a change of recommendation or alternative deal
Conditions	STB approval without a Materially Burdensome Regulatory Condition; CNA (Mexico) approval; votes done 14-Nov-2025 (~99% for). No financing condition; no voting trust
End Date	28-Jan-2028, extended automatically for STB information orders or tolling (471 days away)
Governance	Combined company named Union Pacific, HQ in Omaha (Atlanta stays a core location); Jim Vena is CEO

SOURCES AND USES ($M)

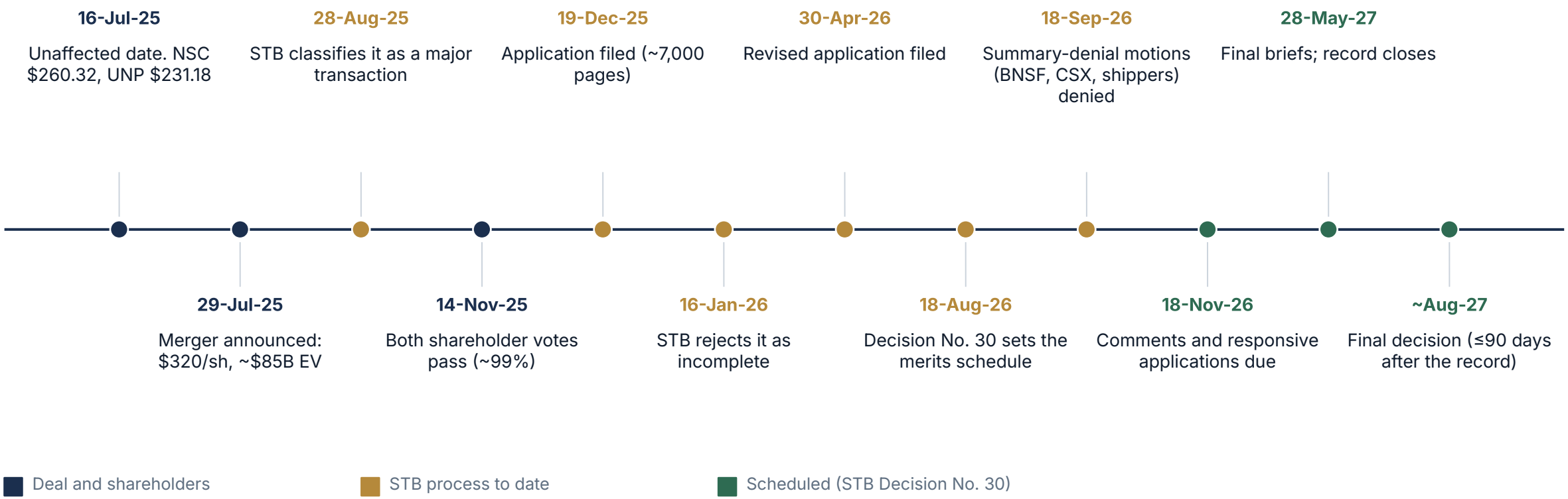
Uses	$M
Cash consideration	20,020
Financing and other costs	190
Total cash uses	**20,210**
Sources	
UNP cash built before close*	5,000
New acquisition debt	15,210
UNP stock to NSC holders	64,561

* Assumption: with buybacks paused, UNP builds ~$5B of cash before closing. The S-4 pro formas assume new debt at 5.0% and $190M of costs; Morgan Stanley used $20.3B of transaction debt.

Source: Agreement and Plan of Merger 28-Jul-2025 (s.2.1, 6.3, 7.1, 7.3); joint press release and investor presentation 29-Jul-2025; 424B3 (pro forma note 6; financing). Model sheets Deal, Financing.

Fifteen months in: the merits review began 18-Aug-2026 and a decision is due by about August 2027

The first application was rejected as incomplete and the revised one was accepted. Motions for summary denial were denied on 18-Sep-2026.



Implication: the companies first targeted closing by early 2027; UNP's latest 10-Q says 2027. We assume 31-Oct-27 (decision ~Aug-2027, effective ~30 days later), with a delayed case on 30-Apr-28. The End Date (28-Jan-2028) extends automatically for STB information orders or tolling.

Source: STB Docket FD 36873: Decision No. 30 (18-Aug-2026; FR Doc. 2026-17024) and decisions of 28-Aug-2025, 16-Jan-2026, 28-May-2026, 18-Sep-2026 and 6-Oct-2026; UNP/NSC 8-Ks; 424B3. Hearing date not yet set.

Strategic rationale: one network across 43 states, built to take freight off the highway

End-to-end: UNP runs west of the Mississippi, NSC east. Coast-to-coast freight is now handed off at Chicago, Memphis, St. Louis or New Orleans.

2024	Union Pacific	Norfolk Southern	Combined
Revenue	$24.3B	$12.1B	$36.4B
EBITDA	$12.5B	$5.5B	$18.0B
Operating ratio	59.9%	66.4%	62.1%
Route miles	32,880	19,200	>50,000
Employees	32,400	19,600	~52,000
Footprint	West	East	43 states, ~100 ports

WHAT THE APPLICANTS SAY THE MERGER DELIVERS

- ~2.1M truckloads a year converted to rail and ~$3.5B of annual shipper savings (revised application)
- New single-line routes that remove interchange delays at the Mississippi gateways
- ~1,200 net new union jobs pledged; $2.1B of incremental capital in the application

OUR READ

- Real: this closes the last coast-to-coast gap in US rail. Single-line service competes with long-haul trucking on transit time, and an end-to-end deal has few 2-to-1 overlaps.
- Defensive: once UNP and NSC combine, BNSF and CSX face pressure to respond. The 2001 rules make the STB weigh that ("cumulative impacts and crossover effects").
- Unproven: about 64% of the $2.75B gross synergies are revenue synergies ($1.75B). Rail revenue-synergy claims have a mixed record, and STB conditions can pass part of them to shippers.
- Execution: integrating two networks is a known risk. UP/SP (1997) and the Conrail split (1999) both caused service crises, and the STB weighs transition risk explicitly.

Source: UNP/NSC investor presentation 29-Jul-2025 (2024 figures, pro forma); STB application 19-Dec-2025 and revised application 30-Apr-2026 (truck conversion, shipper savings, jobs, capital). 2024 figures are company-reported, not LTM.

Since the unaffected date NSC is up 24%, in line with UNP (24%) and well behind CSX (45%)

Prices rebased to 1.00 on 16-Jul-2025. CSX has re-rated on consolidation speculation, which inflates any break value that is drifted with the peers.



CHANGE SINCE 16-JUL-2025

Stock	Close	Change
NSC	$323.73	+24.4%
UNP	$286.43	+23.9%
CSX	$48.28	+45.2%
CPKC (US$)	$86.12	+6.5%
CN (US$)	$119.85	+16.5%
S&P 500	7,719	+23.2%
Peer basket (eq.-wt.)		+22.7%

UNP fell on the announcement, as the market read the price as full, and has since tracked the group. The 10-year Treasury yield rose from 4.46% to 5.19%, which raises discount rates for both companies.

Source: Yahoo Finance weekly closes, 6-Jun-2025 to 14-Oct-2026 (CPKC and CN are NYSE US$ lines). Model sheets Synergies (peer drift) and SpreadHistory.

Standalone profiles: UNP earns a 50% EBITDA margin; NSC earns 45% and is running 9% below its 2026 plan

LTM to 30-Jun-2026 actuals and the UP management projections in the 424B3 (prepared mid-2025). We haircut NSC plan EBITDA by 6% throughout.

LTM 30-Jun-2026 ($M)	UNP	NSC
Revenue	25,410	12,540
Adjusted EBITDA	12,719	5,651
EBITDA margin	50.1%	45.1%
Operating ratio (NSC adjusted)	60.0%	66.2%
Adjusted diluted EPS	$12.27	$12.68
Net debt	28,713	15,547
Net debt / EBITDA	2.26x	2.75x
EV / LTM EBITDA (market)	15.6x	15.6x*
P / LTM adjusted EPS	23.3x	25.5x*

* NSC trades on the deal terms, not on its own fundamentals.

UP MANAGEMENT PROJECTIONS ($B; EPS IN $)

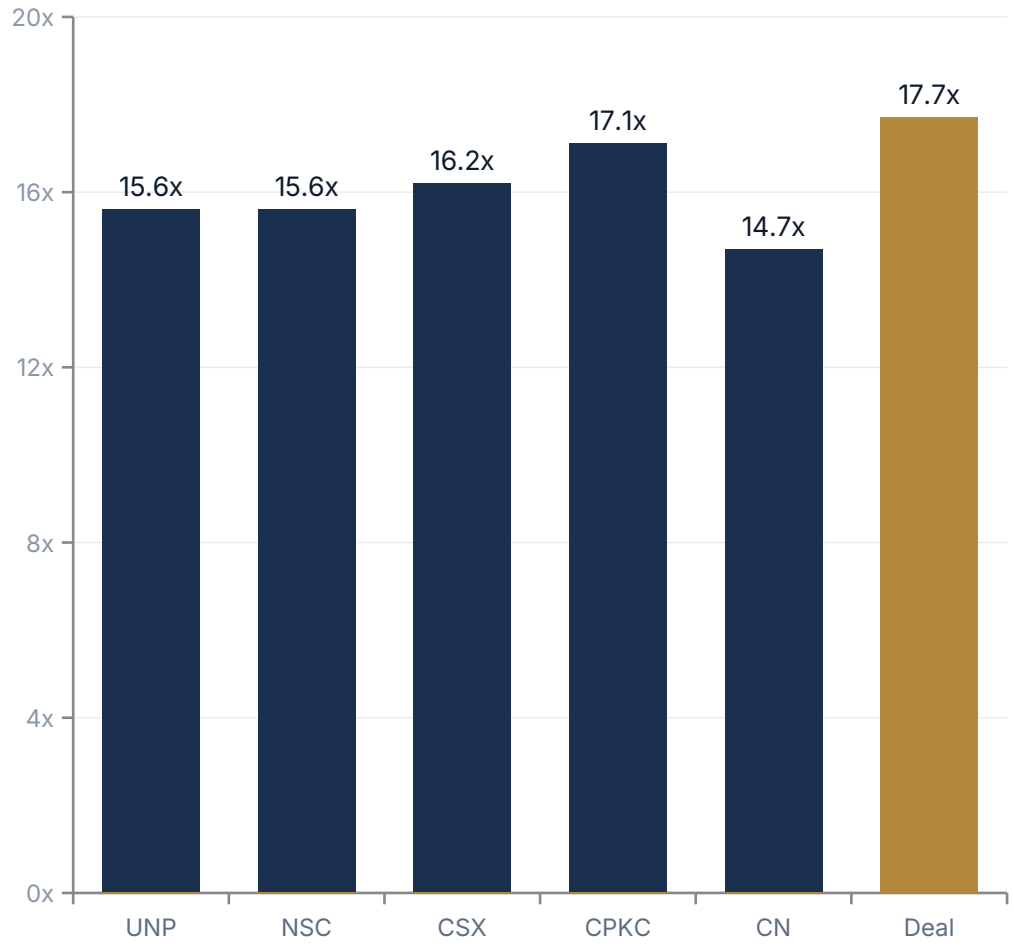
	2026	2027	2028	2029	2030	2031
UNP revenue	25.2	26.1	27.1	28.0	29.1	30.1
UNP EBITDA	13.1	13.7	14.2	14.8	15.4	16.0
UNP capex	3.5	3.6	3.7	3.9	4.0	4.1
UNP EPS	12.57	13.52	14.46	15.50	16.65	17.84
NSC revenue	12.9	13.4	14.0	14.5	15.0	15.6
NSC EBITDA	6.2	6.7	7.1	7.5	7.8	8.0
NSC capex	2.2	2.2	2.2	2.3	2.3	2.4
NSC EPS	14.05	15.72	17.33	19.11	20.86	22.47

- UNP: revenue grows ~3.6% and EBITDA ~4.1% a year to 2031. LTM EBITDA is 2.9% short of the 2026 plan.
- NSC: the plan lifts EBITDA margin from ~48% to ~51%. That is ambitious against an LTM 45% and a 66% adjusted operating ratio, hence our haircut.

Source: UNP and NSC 10-K 2025, 10-Q Q2-2026 and earnings releases (adjusted EPS, NSC non-GAAP items, UNP adjusted EBITDA); 424B3 “Certain Unaudited Prospective Financial Information” (UP management case for both companies). Model sheets Financials, DCF_U, DCF_N.

Trading comps: Class I rails trade at 14.7x–17.1x EBITDA; the deal values NSC at 17.7x

NSC has traded at a discount to the group (6.2% assumed). Private BNSF is shown at UNP's multiple as a reference point.



MULTIPLES AT THE VALUATION DATE

Company	EV ($M)	EV/EBITDA	P/E	EBITDA margin
UNP	198,874	15.6x	23.3x	50.1%
NSC (deal-affected)	88,259	15.6x	25.5x	45.1%
CSX	106,911	16.2x	27.9x	45.5%
CPKC	93,142	17.1x	28.5x	50.0%
CN (FY2025)	88,314	14.7x	22.5x	49.3%
BNSF (private; at UNP multiple)	176,905	15.6x	27.0x	46.1%
Peer median (CSX, CPKC, CN)		16.2x	27.9x	

IMPLIED NSC STANDALONE VALUE

Method	$/NSC share
Peer median EV/EBITDA less NSC discount	$310.04
Peer median P/E less discount	$331.93
Range (peer low to high multiple)	$275.80–$359.09

Source: EDGAR XBRL company facts (10-K 2025 and 10-Q Q2-2026; CN FY2025 6-K/40-F, no 2026 XBRL); Yahoo Finance closes 14-Oct-2026; USD/CAD 1.4213. EBITDA = operating income + D&A (UNP and NSC: company adjusted). Model sheet Comps.

DCF: NSC is worth ~$309 and UNP ~$262 standalone, both below market; the deal pays 21% over NSC's DCF

Unlevered DCF of UP management projections (NSC EBITDA haircut 6%), mid-year discounting from 14-Oct-2026, terminal value at 14.5× 2031 EBITDA.

$M unless noted	UNP	NSC
WACC	8.69%	8.52%
PV of FCF, Q4-26 to 2031	33,913	14,283
PV of terminal value	150,259	71,204
Enterprise value	184,172	85,487
Less net debt (NSC: plus $550M Eastern Ohio)	28,713	16,097
Equity value	155,459	69,390
Value per share	$261.68	$308.94
vs share price	−8.6%	−4.6%
Terminal value share of EV	82%	83%
Implied perpetual growth	4.7%	4.9%
Gordon cross-check at 3% growth	$183.07	$196.15

NSC $/SHARE (GREEN: AT OR ABOVE THE $323.73 PRICE)

WACC \ exit multiple	13.0x	14.0x	14.5x	15.0x	16.0x
−1.0%	$292	$315	$326	$338	$361
−0.5%	$284	$306	$317	$329	$351
+0.0% (base)	$276	$298	**$309**	$320	$342
+0.5%	$269	$290	$301	$311	$333
+1.0%	$261	$282	$293	$303	$324

UNP $/SHARE (GREEN: AT OR ABOVE THE $286.43 PRICE)

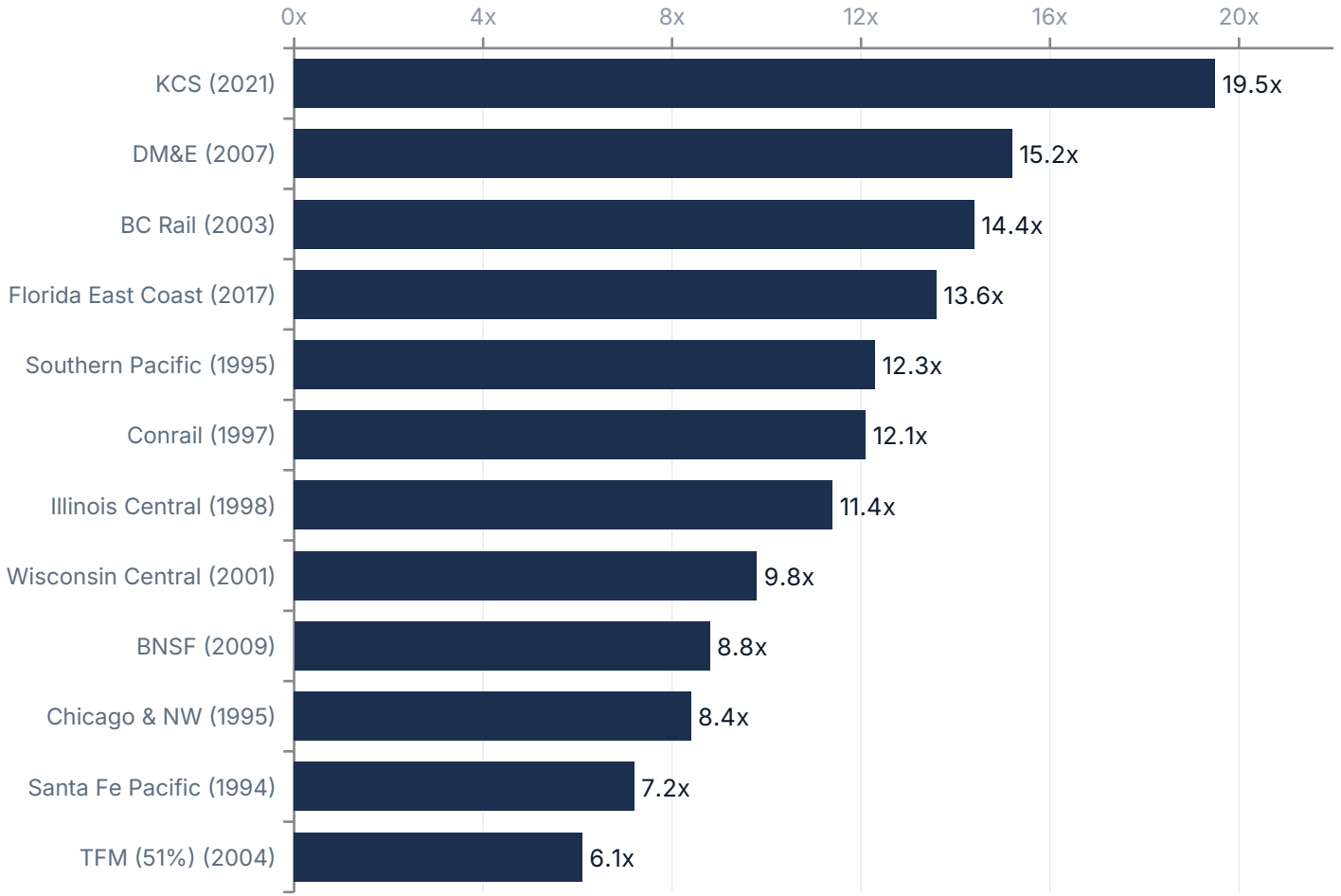
WACC \ exit multiple	13.0x	14.0x	14.5x	15.0x	16.0x
−1.0%	$248	$266	$276	$285	$303
−0.5%	$242	$260	$268	$277	$295
+0.0% (base)	$236	$253	**$262**	$270	$288
+0.5%	$230	$247	$255	$264	$281
+1.0%	$224	$240	$249	$257	$274

UNP's price implies an exit multiple of ~15.9x, above our 14.5x. Rail valuations depend on terminal multiples holding near today's levels.

Source: 424B3 projections. WACC: 10-yr Treasury 5.19% (^TNX 14-Oct-2026); beta 1.0 and ERP 4.25% (assumptions); Kd 5.9%; tax 23.5%. Advisor ranges ex-synergies: MS $274–342, WF $270–350 per NSC share. Model sheets DCF_U, DCF_N.

Precedents: at 17.7x LTM EBITDA today, the deal sits above every rail deal except CP/KCS (19.5x)

At signing the price was 14.0x NTM EBITDA. The 12-deal median is 11.75x and the 2001+ mean 12.5x. Scarcity value has risen as the Class I group shrank to six.



NSC VALUE AT PRECEDENT MULTIPLES

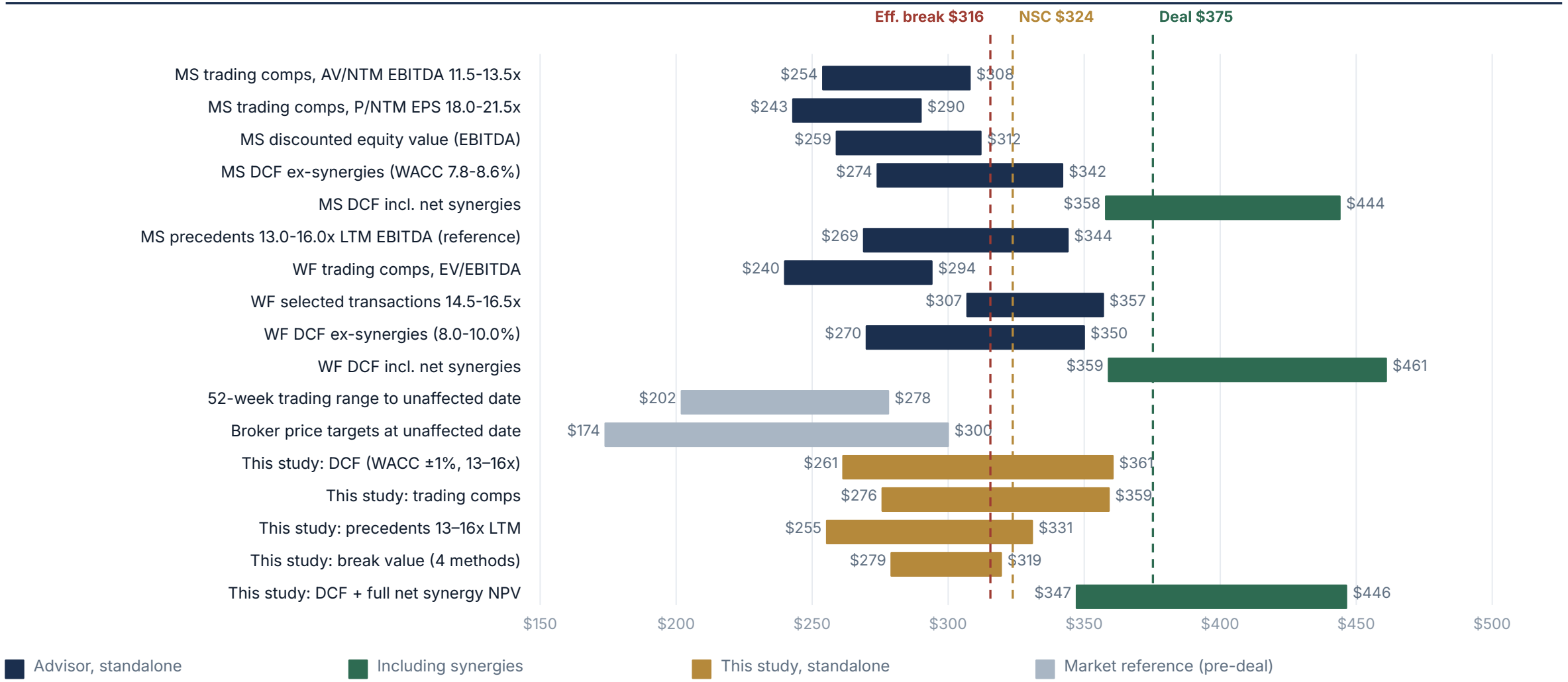
Multiple of LTM EBITDA	$/NSC sh
Median 11.75x	$223.96
13.0x (MS low)	$255.40
16.0x (MS high)	$330.88
19.5x (CP/KCS)	$418.94
Deal value today (17.7x)	$375.25

- The 1994–2004 deals were struck when rail margins were far lower; today's operating ratios are ~60–66%.
- CP/KCS is the closest comparator: a scarce end-to-end network, reviewed under the old rules.
- BNSF (2009) was bought near the cycle trough, at 8.8x.

Source: 424B3, Opinion of Wells Fargo Securities (selected transactions, TEV / LTM EBITDA); Morgan Stanley referenced 13.0–16.0x. NSC LTM adj. EBITDA $5,651M (30-Jun-2026). Model sheet Precedents.

Football field: standalone methods centre on $270–340; only values that include synergies reach the $375 deal value

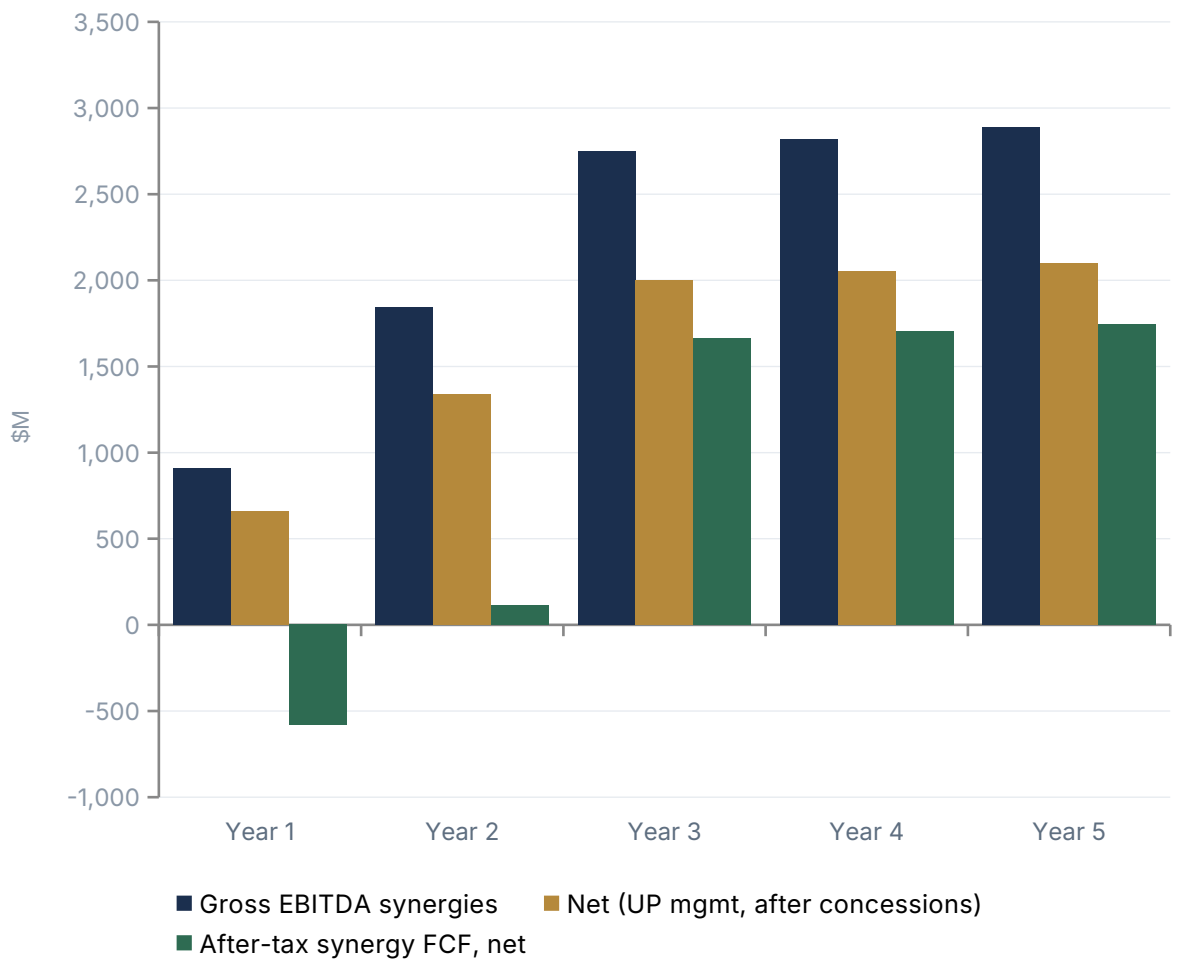
$ per NSC share. Advisor ranges are from mid-2025 fairness opinions; ours are at the valuation date. Dashed lines: effective break, NSC close and deal value.



Source: 424B3: Opinions of Morgan Stanley and Wells Fargo (advisor ranges, 52-week range and broker targets to 16-Jul-2025). This study: model sheets DCF_SUM, Comps, Precedents, Arb, Football.

Synergies: $2.75B gross and $2.0B net of concessions, worth $19.3B today against a $12.6B premium

Company target: run-rate by the end of year 3. We phase 33/67/100%, grow 2.5% a year after, and discount at 9% (WACC plus execution risk).



NPV OF SYNERGIES VS PREMIUM ($M)

Measure	$M	x premium
Gross synergy NPV ($2.75B run-rate)	26,521	2.11x
Net synergy NPV ($2.0B, base)	19,277	1.53x
Cost synergies only ($1.0B)	8,781	0.70x
Premium today (vs peer-drifted $260.32)	12,572	1.00x
Premium at signing ($320 vs $260.32)	13,452	
Company claim (“>$30B value creation”)	30,000	

BREAK-EVEN SYNERGIES

- Net run-rate needed to cover today’s premium: $1.36B, leaving $1.39B of the gross figure for concessions and slippage.
- Revenue synergies are 64% of the gross. Without them the deal does not cover its premium.

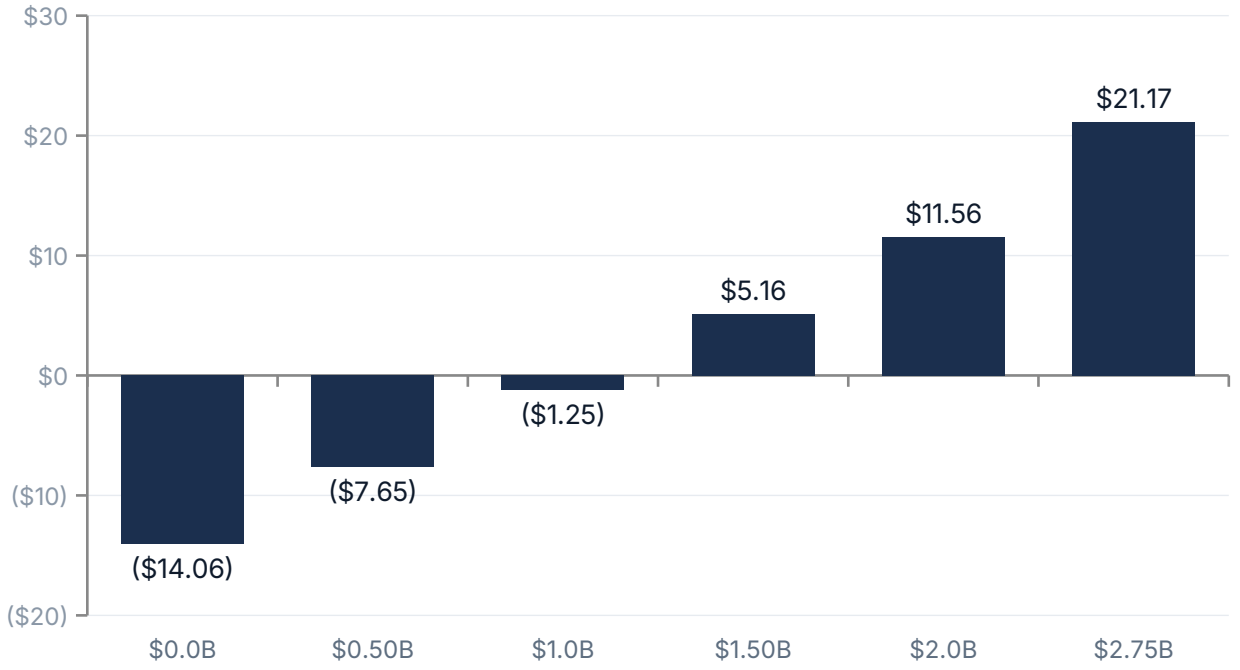
Source: 424B3 and investor presentation 29-Jul-2025 ($1.75B revenue / $1.0B cost synergies; $170M opex and $2.0B capex to achieve; UP management $2.0B net); STB application ($133M capital synergies). Phase-in, growth and discount rate are assumptions. Model sheet Synergies.

For UNP holders: +$6.9B (+$11.56 a share) on $2.0B of net synergies; break-even at $1.1B

Has / gets: UNP holders give up 27.5% of the combined equity and pay the cash; in return they get NSC and the synergies. Standalone values are our DCFs.

Has / gets ($M)	Value
UNP standalone equity (DCF)	155,459
+ NSC standalone equity (DCF)	69,390
+ Net synergy NPV	19,277
– Cash paid and costs	(20,210)
= Pro forma equity	**223,916**
x UNP holders' share	72.5%
= UNP holders get	**162,327**
Value created (gets – has)	**6,869**
As % of UNP standalone value	+4.4%
NSC holders receive per share (DCF basis)	$362.06

VALUE CREATED PER UNP SHARE, BY NET RUN-RATE SYNERGIES

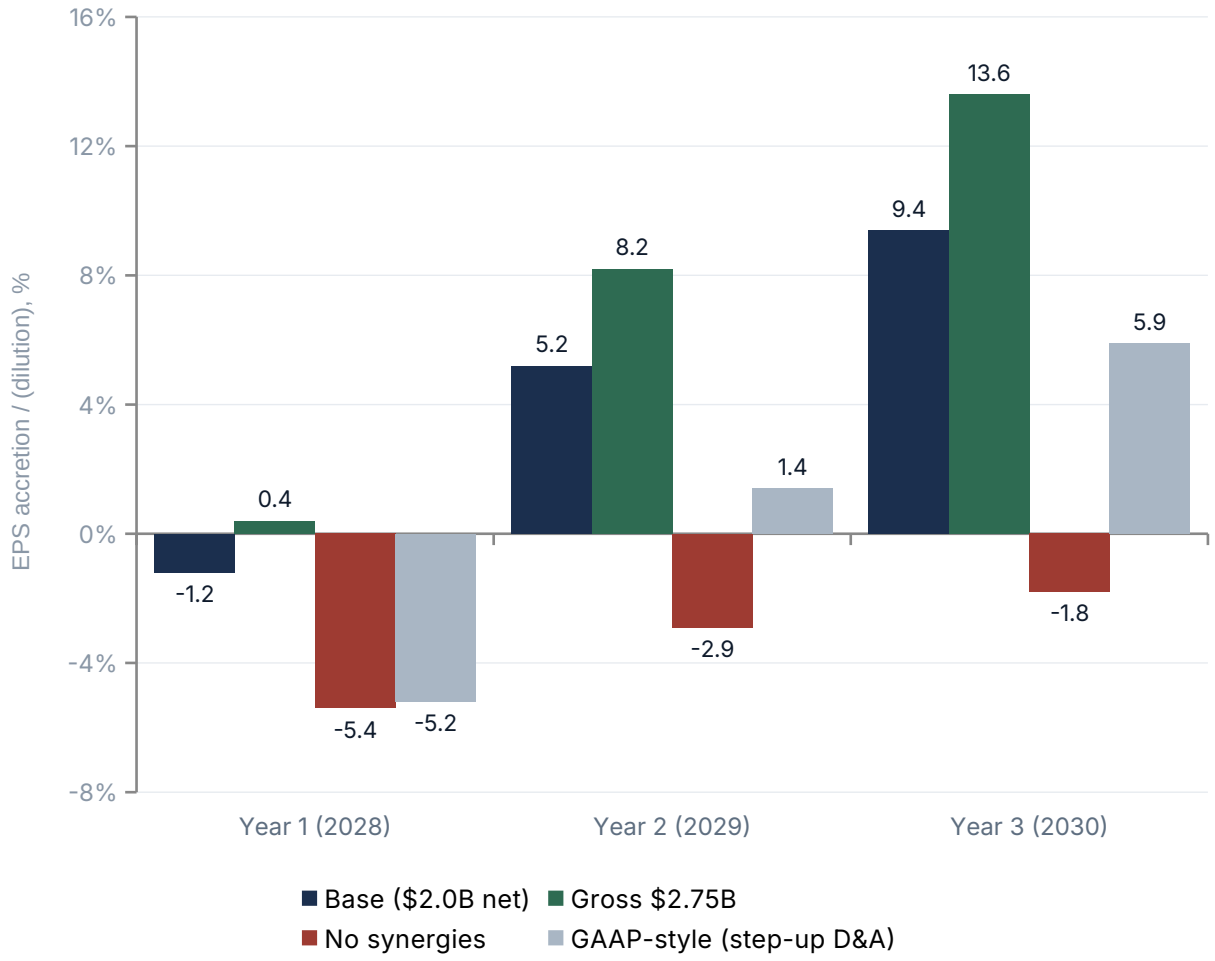


- Each $100M of net run-rate synergies is worth ~$1.05B of NPV, or ~$1.28 per UNP share.
- With no synergies UNP holders lose $8.4B: NSC is bought 21% above its DCF value.
- Verdict: positive, but it depends on execution and on the concessions the STB imposes.

Source: Model sheet Synergies (has/gets block); DCF values from sheets DCF_U and DCF_N. Cash = $88.82 × 225.4M shares + $190M of costs. NSC holders' receipt = $88.82 + pro forma value per share.

EPS: −1.2% in year 1, +5.2% in year 2 and +9.4% in year 3, in line with company guidance

Adjusted EPS (ex purchase-accounting amortisation); close 31-Oct-27. Guidance: accretive early in year 2, high single digits in year 3+.



PRO FORMA EPS BUILD ($M)

	2028	2029	2030
UNP standalone net income	8,589	9,207	9,890
NSC net income (haircut)	3,573	3,956	4,335
Net synergies after tax	505	1,025	1,530
Cost to achieve after tax	-130	0	0
Interest on new debt after tax	-669	-669	-669
Lost interest on cash used	-156	-156	-156
Pro forma net income	**11,712**	**13,362**	**14,930**
Pro forma shares (M)	819.4	819.4	819.4
Pro forma EPS	**$14.29**	**$16.31**	**$18.22**
UNP standalone EPS	$14.46	$15.50	$16.65
Accretion / (dilution)	**−1.2%**	**+5.2%**	**+9.4%**
Pre-tax synergies for EPS-neutral	838	475	317

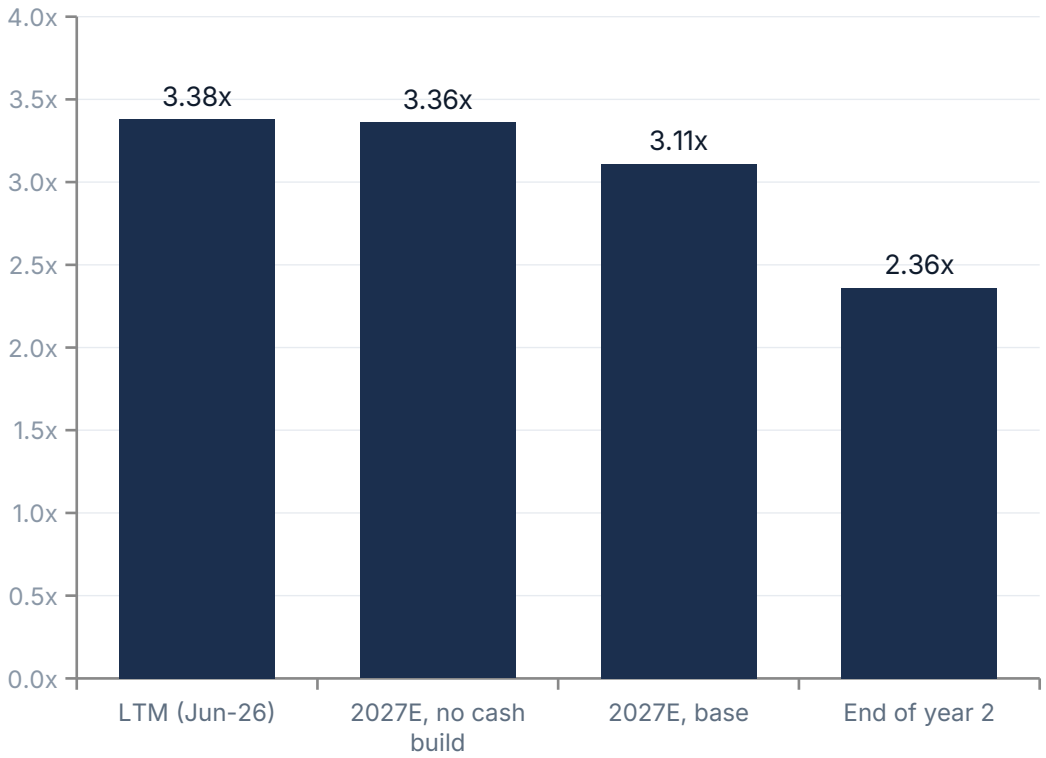
GAAP-style line adds an illustrative $25B PP&E step-up depreciated over 40 years (assumption; the S-4 allocation is preliminary).

Source: 424B3 UP management EPS projections (UNP and NSC); investor presentation 29-Jul-2025 (guidance). New debt $15.2B at 5.75% (assumption); NSC earnings haircut 6%; 225.4M new shares; share counts held flat. Model sheet ProForma.

Financing: ~$15B of new debt takes leverage to ~3.1x at close, falling to ~2.4x by year 2 before buybacks

UNP has committed to an "A" rating, paused buybacks until year 2 and kept the dividend. We assume a ~$5B pre-close cash build and no buybacks in years 1–2.

PRO FORMA GROSS DEBT / EBITDA



Guidance: ~3.3x at close and ~2.8x by year 2 (with buybacks resumed). UNP alone today: 2.26x net debt / EBITDA.

PRO FORMA CREDIT PROFILE ($M)

Measure	Value
UNP + NSC debt (30-Jun-26)	46,943
+ New acquisition debt	15,210
Pro forma gross debt	**62,153**
Pro forma 2027E EBITDA (no synergies)	19,998
FCF after dividends, year 1 / year 2	4,423 / 5,919
EBITDA / interest (2027E)	6.8x
After-tax cost of new debt (a year)	669

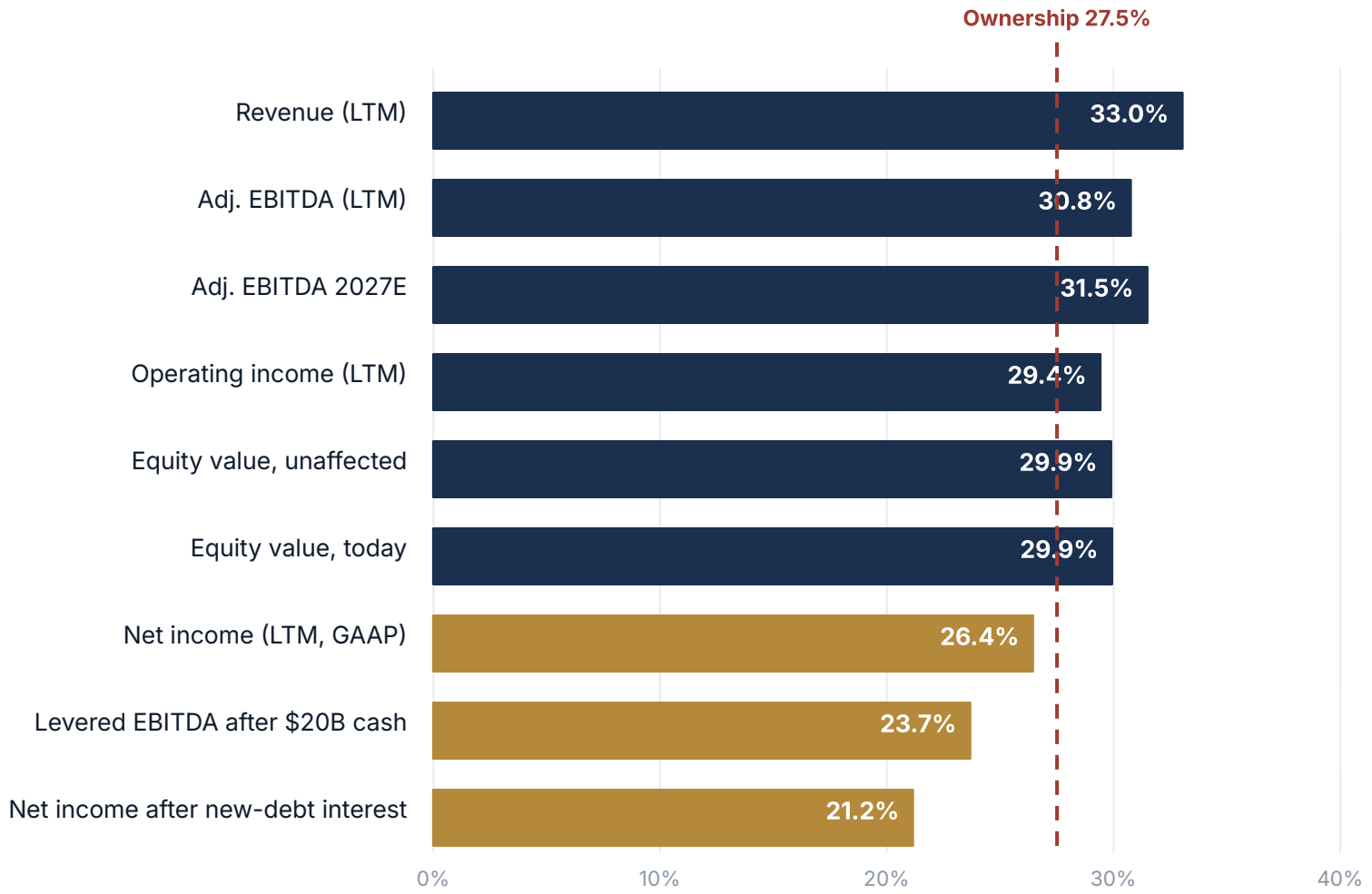
RATINGS

- UNP: A3 / A- / A- (Moody's / S&P / Fitch, Feb-2025 FWP). Fitch put UNP on Rating Watch Positive on 29-Jul-2025 and kept it there on 15-Jul-2026.
- NSC: S&P outlook positive. Moody's Baa1 on review for upgrade (secondary source; not verified).
- At ~3.1–3.4x, holding the "A" needs fast deleveraging; the timing of the year-2 buyback restart is the swing factor.

Source: Investor presentation 29-Jul-2025 (~3.3x at close, ~2.8x by year 2, buybacks resume in year 2 and reach $10B+ a year by year 3); 10-Q Q2-2026 balance sheets; FWP Feb-2025 (UNP A3/A-/A-); Fitch rating actions 29-Jul-2025 and 15-Jul-2026. Model sheet Financing.

Contribution: NSC brings ~31% of EBITDA for 27.5% of the shares, plus $20B of cash

Unlevered, NSC contributes more than its ownership. Charge NSC holders for the cash they receive and the levered contribution falls to 24%, below 27.5%.



READING THE ANALYSIS

- NSC holders get 27.5% of the shares plus $20.0B of cash. Together that is worth more than the 29–31% of EBITDA they contribute: the gap is the control premium.
- NSC's net income share is lower (26%, or 21% after new-debt interest) because it carries more D&A and debt per $ of EBITDA.
- The exchange ratio is fixed, so NSC holders share in UNP's price moves, up or down, until closing.

Source: LTM to 30-Jun-2026 from company filings; 2027E from 424B3 projections (NSC haircut 6%); prices 16-Jul-2025 and 14-Oct-2026. Levered EBITDA contribution at UNP's EV/EBITDA, less each side's net debt and the cash paid. Model sheet Contribution.

The STB test: under the 2001 rules applicants must show the merger enhances competition, not just preserves it

This is the first combination of two Class I railroads reviewed under the 2001 rules. CPKC (2023) was decided under the earlier rules through a waiver for KCS.

WHAT THE BOARD MUST FIND

Element	Standard
Public interest (11324(c))	Approve if consistent with the public interest; broad power to impose conditions
Statutory factors (11324(b))	Adequacy of service; effect of including other carriers; fixed charges; employees; rail competition
2001 policy (1180.1(c))	"Substantial and demonstrable" public benefits must outweigh anticompetitive effects and service risk
Enhanced competition (1180.1(d))	Applicants "should propose conditions that would not simply preserve but also enhance competition"
Crossover effects (1180.1(i))	Must address how further Class I mergers would affect the industry and the conditions
Service and safety (1180.1(f), (h))	Service Assurance Plan with benchmarks; Safety Integration Plan with the FRA
Oversight (1180.1(g))	At least 5 years of formal oversight; the Board can add conditions
Timing (11325(b))	Evidence closes within 1 year of the notice; final decision within 90 days after that

LIKELY CONDITIONS, AND WHAT THE CONTRACT SAYS

- Expect: commitments to keep the Chicago, Memphis, St. Louis and New Orleans gateways open on reasonable terms; trackage rights where shippers lose an option; service benchmarks; extended oversight (CPKC got 7 years); New York Dock labour protection; environmental mitigation.
- Opposition: BNSF, CSX and a shipper coalition (ACC, AFPM, ACD, NITL, TFI) sought summary denial. The STB refused on 18-Sep-2026, calling it a transaction of first impression that needs a full record.
- Contract: UNP must use reasonable best efforts, including divestitures, but need not accept a Materially Burdensome Regulatory Condition. If the End Date passes without STB approval, or a final order blocks the deal, UNP pays NSC $2.5B.
- Our base case: approval with significant but tolerable conditions that use up part of the $0.75B gap between gross and net synergies.

Source: 49 U.S.C. 11321–11328 (esp. 11324(b)–(c), 11325(b)); 49 CFR 1180.1 (Major Rail Consolidation Procedures, EP 582 (Sub-No. 1), 66 FR 32583, 15-Jun-2001); STB decision FD 36500 (15-Mar-2023); STB decision of 18-Sep-2026 denying summary denial.

Timeline and precedent: CPKC took ~17 months from application to decision under the old rules; UNP/NSC is on a similar path

Decision No. 30 sets the merits schedule. The hearing date is still to be set, and the Board must decide within 90 days of the final briefs.

PROCEDURAL SCHEDULE (DECISION NO. 30)

Step	Date
Application accepted (held in abeyance)	28-May-2026
Decision No. 30: schedule adopted	18-Aug-2026
Notices of intent to participate (extended)	30-Sep-2026
Comments, responsive applications	18-Nov-2026
DOJ and USDOT comments	3-Dec-2026
Responses and rebuttal	16-Feb-2027
Rebuttal on responsive applications	29-Mar-2027
Oral argument / hearing	To be set
Final briefs	28-May-2027
Final decision (no later than)	~26-Aug-2027
Assumed close (this study)	31-Oct-27

CPKC (2023) VS UNP/NSC

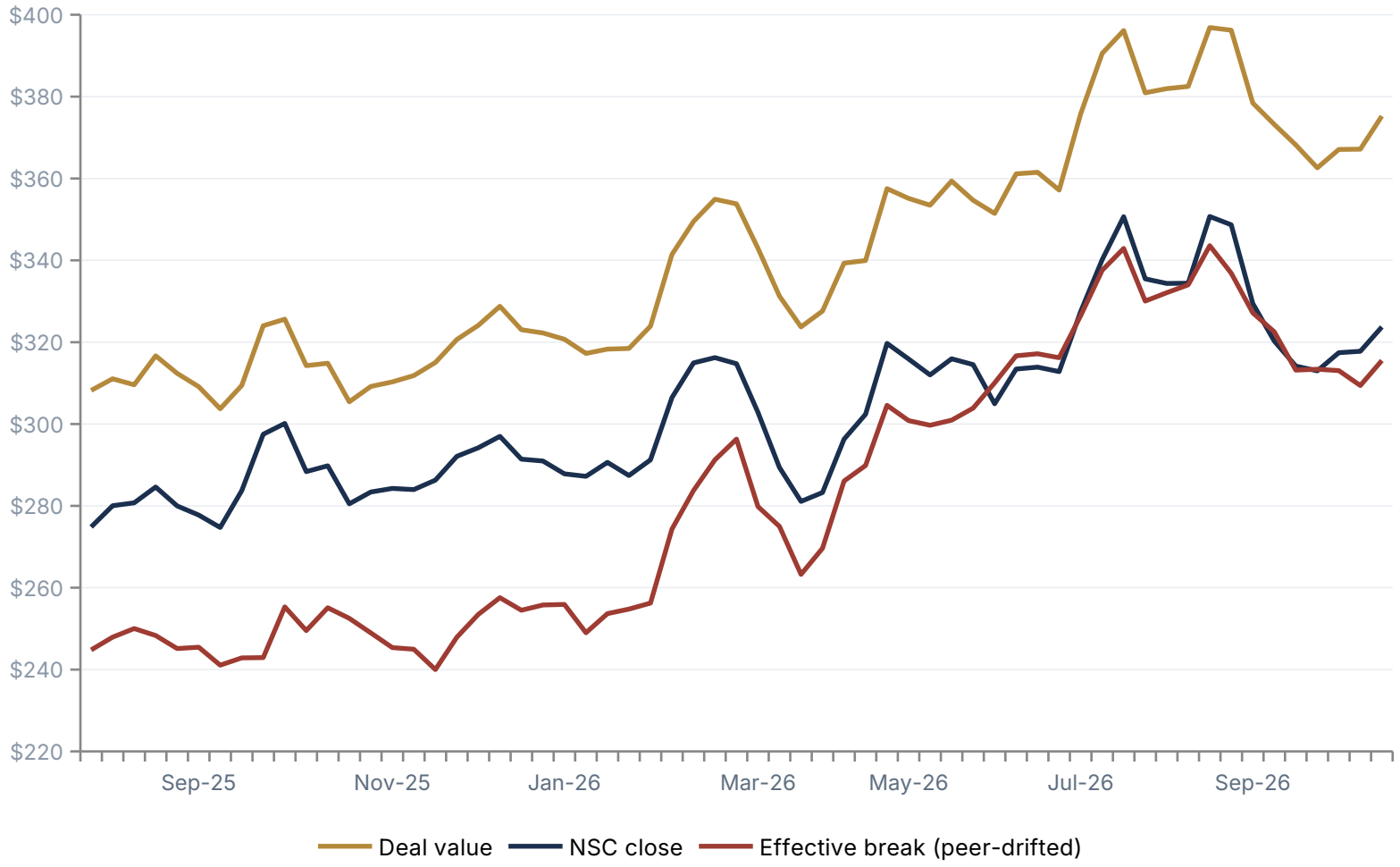
	CP / KCS	UNP / NSC
Rules applied	Pre-2001 (KCS waiver)	2001 rules (enhance competition)
Type	End-to-end, 3 countries	End-to-end, US
Size (EV at signing)	~$31B	~$85B
Voting trust	Yes (Dec-2021)	No
Application to decision	Oct-2021 to Mar-2023 (~17 mo.)	Apr-2026 to ~Aug-2027 (~16 mo.)
Opposition	CN (rival bidder), some shippers, Metra	BNSF, CSX, shipper coalition
Outcome	Approved with conditions; 7-yr oversight	Pending
Class I railroads after	6	5

Read-across: CPKC shows the Board will approve an end-to-end deal with heavy conditions and long oversight. But CPKC faced a lower bar, used a voting trust to protect its sellers, and left six Class I railroads; this deal would leave five.

Source: STB Decision No. 30 (FD 36873, 18-Aug-2026; FR Doc. 2026-17024); STB decisions of 30-Sep-2026 (deadline extension) and 6-Oct-2026; STB FD 36500 decision 15-Mar-2023, effective 14-Apr-2023 (CPKC dates per that decision).

The spread: $51.52 (15.9%) gross, 15% annualised to a 31-Oct-27 close

NSC weekly closes vs the deal value (UNP x 1.0 + $88.82) and the peer-drifted effective break. The spread widened after the Jan-2026 rejection.



SPREAD AT THE VALUATION DATE

Measure	Value
Deal value	$375.25
NSC close	$323.73
Gross spread	$51.52 / 15.9%
Forward spread (carry, dividends)	$49.65
Annualised (simple)	15.2%
Over T-bill (4.08%)	11.1%
Days to assumed close	382

- Narrowest weekly spread: 8.5% (3-Oct-25).
- Widest: 17.2% (18-Sep-26).
- The stock leg is hedged by shorting 1.0 UNP. The $88.82 cash leg is fixed, so a falling UNP widens the % spread.

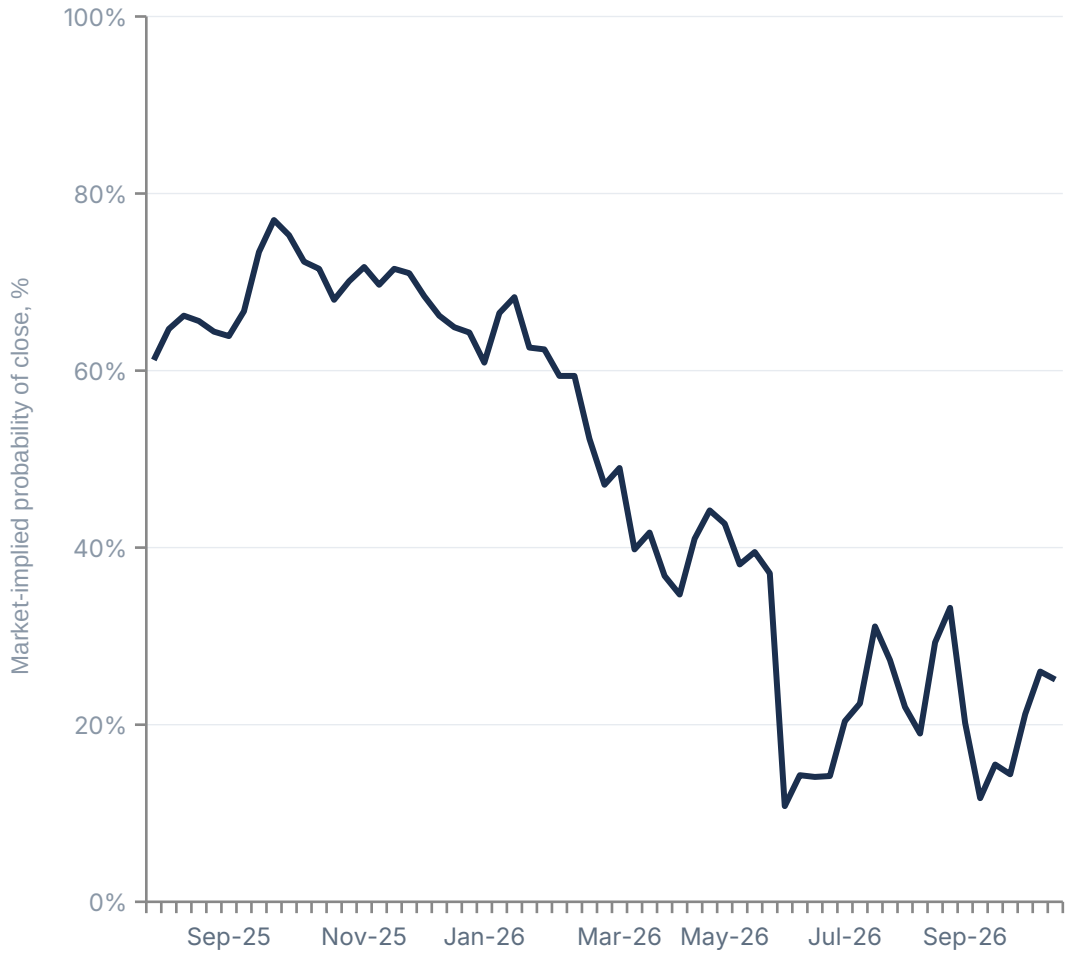
Source: Yahoo Finance weekly (Friday) closes 1-Aug-2025 to 14-Oct-2026; model sheet SpreadHistory. Effective break = $315.52 at the valuation date (incl. the $11.13 reverse fee) x peer index.

The market implies a 25% chance of closing, down from ~60–75% in late 2025

Implied P = (NSC forward − break) / (deal value forward − break), with the $2.5B reverse fee added to the break. The answer is very sensitive to the break value.

Break-value method	$/NSC sh	Implied P
M1 NSC unaffected x peer drift (+22.7%)	$319.48	3%
M2 Peer median EV/EBITDA less NSC discount	$310.04	18%
M3 NSC standalone DCF	$308.94	20%
M4 Unaffected NSC/UNP multiple ratio (0.892) x UNP today	$279.11	46%
Base break (average)	**$304.39**	
+ Reverse termination fee	$11.13	
Effective break	**$315.52**	**25%**
Spot basis (no carry)		14%

Our read: M1 is inflated by CSX's takeover-speculation rally, and M4 is the cleanest relative measure. A lower break would raise the implied probability.



Source: Model sheets Arb and SpreadHistory. Forward basis: carry at the 13-week T-bill (4.08%) and four quarterly dividends each side to 31-Oct-27. The history uses that fixed close date, which overstates the horizon for 2025 dates (closing was then expected in early 2027).

Scenarios: we put the chance of closing at 55%; the hedged trade then earns +$20.50 per NSC share (6.3% of notional)

Four outcomes. The probabilities are our judgement (assumptions). Payoffs per NSC share include dividends to resolution; PV at the T-bill rate.

	Outcome	Prob.	Payoff	PV	Return
A	Approved with tolerable conditions; closes 31-Oct-27	47%	$380.65	$365.03	+17.6%
B	Approved after delay; closes 30-Apr-28	8%	$383.35	$360.35	+18.4%
C	Approved with a burdensome condition; UNP walks and pays $2.5B	5%	$320.92	$307.75	−0.9%
D	STB denies (or deal withdrawn); $2.5B paid	40%	$320.92	$308.80	−0.9%
	Probability-weighted (unhedged long NSC)	100%	$353.99	$339.30	+9.3%

Unhedged long NSC: expected excess return over T-bills +4.8% (PV). Hedged: a $51.24 gain if it closes and a $17.08 loss if it breaks; breakeven P(close) 25%.

Why 55%: major end-to-end and parallel combinations have been approved with conditions (UP/SP 1996, Conrail 1998, CPKC 2023); the Board refused summary denial; the parties have strong incentives to offer remedies. Against: the 2001 bar, organised Class I and shipper opposition, and the rejected first application.

HEDGED EXPECTED P&L, % OF NOTIONAL

P(close) \ break shift	−$40	−$20	+$0	+$10
30%	−7.6%	−3.3%	+1.1%	+3.2%
40%	−4.2%	−0.5%	+3.2%	+5.0%
50%	−0.9%	+2.2%	+5.3%	+6.8%
55% (base)	+0.8%	+3.6%	**+6.3%**	+7.7%
60%	+2.4%	+4.9%	+7.4%	+8.6%
70%	+5.8%	+7.6%	+9.5%	+10.4%

Columns shift the effective break ($/NSC share). The trade loses money if the chance of closing is below ~25% at our base break, or below ~42% if the break is $20 lower.

Source: Model sheet Scenarios. Hedged P&L = long 1 NSC, short 1 UNP. Close: spread + dividend difference. Break: effective break − NSC price − a 3% UNP rise (assumption) + dividend difference.

Risks and mitigants: regulation dominates for the arb; synergies and leverage dominate for UNP holders

Ranked by expected damage. Impacts per NSC share for the hedged arb, and per UNP share for the deal-merit view.

Risk	Likelihood	Impact	Mitigant / rule
STB denies, or conditions trigger a walk (MBRC)	**Medium-high**	Hedged arb: −$17.08/sh (−5.3% of notional)	Size to a 0.5% NAV loss (~9% of NAV long notional). The $2.5B fee ($11.13/sh) cushions a regulatory break.
Break value lower than modelled (sector de-rates, CSX premium fades)	Medium	Each $10 lower costs ~1.4% of expected return	M4 (relative multiple) gives $279; at that break the trade still earns + $9.12/sh.
Delay beyond Aug-2027 (hearing, remand, appeal)	Medium	Lower annualised return; carry on the short	The End Date auto-extends for STB delays; scenario B (8%) prices a six-month slip. Carry is largely matched long and short.
Revenue synergies fall short; concessions larger	Medium	UNP holders: value turns negative below ~$1.1B net	Cost synergies ($1.0B) are more controllable. Track STB conditions against the $0.75B gross-to-net cushion.
Integration and service disruption (UP/SP precedent)	Medium	Earnings and STB oversight risk	Service Assurance Plan, Safety Integration Plan, 5+ years of oversight, staged cut-over.
Leverage and rating pressure (~3.1–3.4x)	Low-medium	Higher funding cost; buybacks delayed	No financing condition; pre-close cash build; buybacks paused; “A” commitment.
Borrow cost or squeeze on the UNP short	Low	Hedge slippage	UNP is a liquid large-cap, and the 1.0 ratio is fixed, so the hedge stays exact to closing.

Source: Merger agreement s.6.3, 7.1, 7.3; 49 CFR 1180.1; STB decisions in FD 36873; model sheets Arb, Scenarios, Synergies, Financing; Fitch rating watch (29-Jul-2025, 15-Jul-2026).

Recommendation: support the deal as a UNP holder; go long NSC / short UNP at ~9% of NAV notional

Two separate views. The merger creates modest value for UNP holders on management's net synergies, and the spread prices too little chance of approval.

Deal merit for UNP holders: qualified support

- Value created: +$6.9B (+$11.56/sh, +4.4%) at $2.0B net synergies; synergies cover the premium 1.53x.
- EPS: −1.2% / +5.2% / +9.4% in years 1–3, consistent with guidance.
- But the price is full (17.7x LTM EBITDA today) and cost synergies alone do not cover it. Break-even is ~$1.1B of net synergies.
- Watch: the conditions the STB attaches, evidence for revenue synergies in the record, and the leverage path to ~2.8x.

Arb: long NSC / short 1.0 UNP

- Market-implied P(close) 25% vs our 55%; breakeven 25%.
- Payoff +$51.24 / −$17.08 per NSC share (3.0:1); expected +6.3% of notional over ~1 year.
- Size: 9.5% of NAV long notional, so a break costs 0.5% of NAV and a close adds ~1.5%.
- Add on a hearing order or DOJ/USDOT comments (3-Dec-2026) without broad remedies; cut on broad trackage-rights requests or a CSX/BNSF counter-deal.

$11.56
Value created per UNP share

+9.4%
Year-3 EPS accretion

25% vs 55%
Implied vs our P(close)

+6.3%
Hedged expected P&L, % notional

WHAT WOULD CHANGE OUR MIND

Deal: STB conditions that cut net synergies below ~$1.1B, or a downgrade out of the A category. Arb: a schedule that pushes the decision into 2028, a UNP statement that conditions are unacceptable, or NSC above ~$345 with no news (implied P above ~50%).

Source: Model (all figures). The rules are the case study's own and are illustrative. Not investment advice.

Appendix: key assumptions and items that could not be verified

Every input is in the Inputs sheet and figures.json with unit, as-of date and source URL, or is flagged as an assumption (28 assumptions).

KEY ASSUMPTIONS

Assumption	Value
Close: base / delayed / denial date	31-Oct-27 / 30-Apr-28 / 30-Sep-27
P(A) / P(B) / P(C) / P(D)	47% / 8% / 5% / 40%
WACC inputs: beta / ERP / Kd	1.0 / 4.25% / 5.9%
Exit multiple; NSC plan haircut	14.5x; 6%
Synergy phase-in; growth; discount rate	33/67/100%; 2.5%; 9%
New-debt coupon; pre-close cash build	5.75%; $5B
UNP move on a break; loss budget	+3%; 0.5% of NAV
NSC discount to peer multiple	6.2%

NOT VERIFIED FROM PRIMARY SOURCES, OR INTERPRETIVE

- NSC credit ratings and outlooks (Moody's Baa1 review): secondary source.
- CN multiples use FY2025 (no 2026 XBRL). BNSF EBITDA = operating income + D&A from BNSF LLC filings.
- NSC LTM adjusted EBITDA adds back company non-GAAP items (merger costs, restructuring, Eastern Ohio net recoveries).
- Close date and scenario probabilities are our judgement; the STB hearing date is not set.
- End Date extension mechanics and MBRC scope are read from the agreement; how they apply in practice could differ.
- Size of eventual STB concessions, and whether UP management's $2.0B net case (prepared mid-2025) is still current.
- CPKC application and voting-trust dates come from the STB decision summary, not a full re-read.

Source: figures.json; model/UNP_NSC_merger_model.xlsx (check.py: LibreOffice recalculation, 0 mismatches). Primary sources: SEC EDGAR (merger agreement, 424B3, 8-K, 10-K, 10-Q), STB Docket FD 36873, Federal Register, eCFR. Prices: Yahoo Finance.