

Intermodal selection: a shipper decision guide

Screen the lane. Test the net savings. Secure the service.

Use: procurement and operations complete page 1; finance validates page 2; the award team uses page 3 to negotiate and control execution. Repeat by lane, direction and service class.

Lane / direction _____

Owner / provider / review date _____

1 | Clear the non-negotiable gates

Decision gate	Evidence to obtain	If the gate fails
Delivery requirement	Recent door-to-door median and 90th/95th-percentile transit; sample size, missed departures, cutoffs and receiving windows.	Retain OTR or price a supported premium option. Do not base inventory on median transit alone.
Cargo and equipment	Written commodity acceptance; usable cube, payload and axle distribution; rail load plan, securement and temperature/high-value protocols. [1]	Exclude the load until the provider confirms a workable equipment and handling plan.
Capacity and route	Ramps, railroads/interchanges, both drays, equipment access, accepted volume bands and peak allocation. Service differs by lane. [2]	Seek a qualified alternative. A rate or timetable does not reserve equipment.
Facility execution	Loading/receiving hours, gate cutoffs, unloading capability, availability alerts and empty-return instructions.	Correct the facility constraint or count its full cost before bidding.
Continuity	Named exception owner, escalation deadline and an OTR or alternate-route recovery option with usable capacity.	Do not award a critical flow on savings alone.

2 | Choose the lane action

Pilot: all gates pass and base plus delay scenarios support the business requirement. **Renegotiate:** fit is sound but fuel, free time, capacity or recovery terms erase value. **Retain OTR:** the delivery, cargo or continuity requirement cannot be supported.

Set the minimum net saving and service threshold for your business before evaluating bids. No universal mileage, conversion share or savings percentage establishes lane suitability.

Count the full delivered cost

A quote discount becomes a saving only after operating costs.

Net saving per load = comparable OTR decision cost - intermodal decision cost.
Net saving % = net saving / comparable OTR decision cost. Compare the same quantity, direction, equipment, service requirement and quote period. Add only incremental business costs; identify costs already included in each quote.

Cost element	OTR: your lane	Intermodal: your lane
Transport, fuel, both drays, ordinary equipment Itemize inclusions and exclusions.	\$ _____	\$ _____
Incremental inventory / safety-stock carrying cost	\$ _____	\$ _____
Extra loading, securement or transload cost	\$ _____	\$ _____
Expected incremental delay / recovery expense	\$ _____	\$ _____
Other recurring incremental costs	\$ _____	\$ _____
Total comparable decision cost	\$ _____	\$ _____
Net saving / net saving %		\$ _____ / _____ %

Worked example | Planning inputs, not a quote or benchmark

OTR **\$3,600** vs. intermodal **\$2,700** including both drays, fuel and normal equipment. Add \$110 inventory, \$80 preparation and \$100 expected recovery: **\$2,990 total**. Net saving: **\$610 per load / 16.9%**, rather than the 25% transportation discount.

Inventory example: \$100,000 cargo value x 20% annual carrying rate x 2 extra days / 365 = \$109.59. Finance supplies the valuation and carrying rate. Separate pipeline inventory from additional safety stock.

Stress-test the saving before committing volume

Replace the \$100 expected recovery allowance with \$450 terminal/equipment charges plus \$350 actual recovery. Total becomes **\$3,690**, or **\$90 above OTR**. Keep the \$110 inventory allowance only if the two-day assumption still holds; add carrying cost for further delay. Do not count expected and realized costs for the same event twice.

Price normal and delayed invoices. Include one missed departure, a receiver closure and equipment return delay. Use current written charge rules and observed facility performance, not generic daily fees.

Translate lane results into a portfolio benefit

Annual benefit = converted loads x repeatable net saving per load - incremental program costs. Alternatively, eligible comparable spend x net saving rate, less program costs. Do not apply a lane saving rate to ineligible spend.

Illustration: \$100M comparable OTR spend x 25% eligible x 10% net saving = **\$2.5M**, or **2.5% of the full spend base**, before implementation costs. Deduct integration, added staffing, equipment and other incremental program costs once. Avoid double counting amounts already included per load. Reduced freight expense and released working capital are different benefits.

Negotiate, pilot and control

Make the award measurable before the first tender.

Bid / negotiation item	Require in writing
Comparable bids	Same shipment file and service class; at least two workable offers plus an OTR alternative where available. Normal and delayed invoice examples.
Full charge basket	Base transport, each dray, lifts, chassis, equipment positioning, fuel and all exclusions. No hidden ramp-to-ramp assumption.
Fuel formula	Index, base/trigger, lag, reset frequency and separate rail/dray components. Compare invoices at current diesel and \$1/gallon higher and lower; test decreases too.
Free time and extra charges	Start/stop event, last free day, hourly/daily tiers, calendar/business days, weekend rules, notification recipient and empty-return requirements. [3]
Capacity for commitments	Forecast/tender lead time and volume bands exchanged for documented equipment access, accepted tenders and peak allocation. Specify review/exit triggers.
Exceptions and liability	Coordinator, notification deadline, recovery authority, approval limit, cost allocation, cargo liability/exclusions and claims deadlines.

Price operational concessions by expected value

Illustration: \$35/load for additional free time avoids a \$150 fee on 30% of loads: \$45 expected avoided cost, or **\$10 net value**. At 10% incidence, the avoided cost is \$15: **\$20 net cost**. Substitute actual dwell history, applicable fee tiers and the supplier offer.

Pilot scorecard and expansion rule

Measure **net delivered cost, tender acceptance, door-to-door transit and slower-tail transit, appointment performance, dwell, cargo claims, rescue costs and productive equipment turns**. Include rejected/cancelled moves and OTR recoveries. Compare with contemporaneous OTR results.

Use a limited repeat-lane pilot covering multiple departure days; four to six weeks is a starting plan, not proof of rare-event reliability. Expand only after the agreed savings and service gates hold. Review monthly and reconcile the business case quarterly.

Minimum net saving / delivery standard _____

Recovery owner / approval limit _____

Decision: pilot / award / renegotiate / retain OTR _____

Source checks and full analysis

[1] Union Pacific: loading, securement, axle distribution and cargo rules.
[2] BNSF: service options and lane-specific requirements.
[3] BNSF: availability notifications and terminal storage. Obtain applicable current rules with the bid; domestic rail and maritime fee regimes differ.

Read FIR's full intermodal shipper guide and source notes