

NTRRPA/AI GEN AI STRATEGY

Strategic Risk Analysis

Strait of Hormuz Oil Tanker Movement Delays

Forecasting Potential Disruptions Over the Next 2 Quarters (Q1–Q2 2026)

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"Based on historical disruption data and current trends, forecast the potential delays in oil tanker movements through the Strait of Hormuz over the next 2 quarters due to escalating US-Iran tensions"

Executive Summary

135

Weekly Transits
(down from 182)

5.6d

Avg Delay Q1
(Prob-Weighted)

2.9×

VLCC Cost
Multiplier

40%

Escalation
Probability

The Strait of Hormuz is experiencing its most acute tension since the 1980s Iran–Iraq Tanker War. US–Iran military confrontations, shadow fleet seizures, and the aftermath of Operation Midnight Hammer have created a structural risk environment persisting through mid-2026.

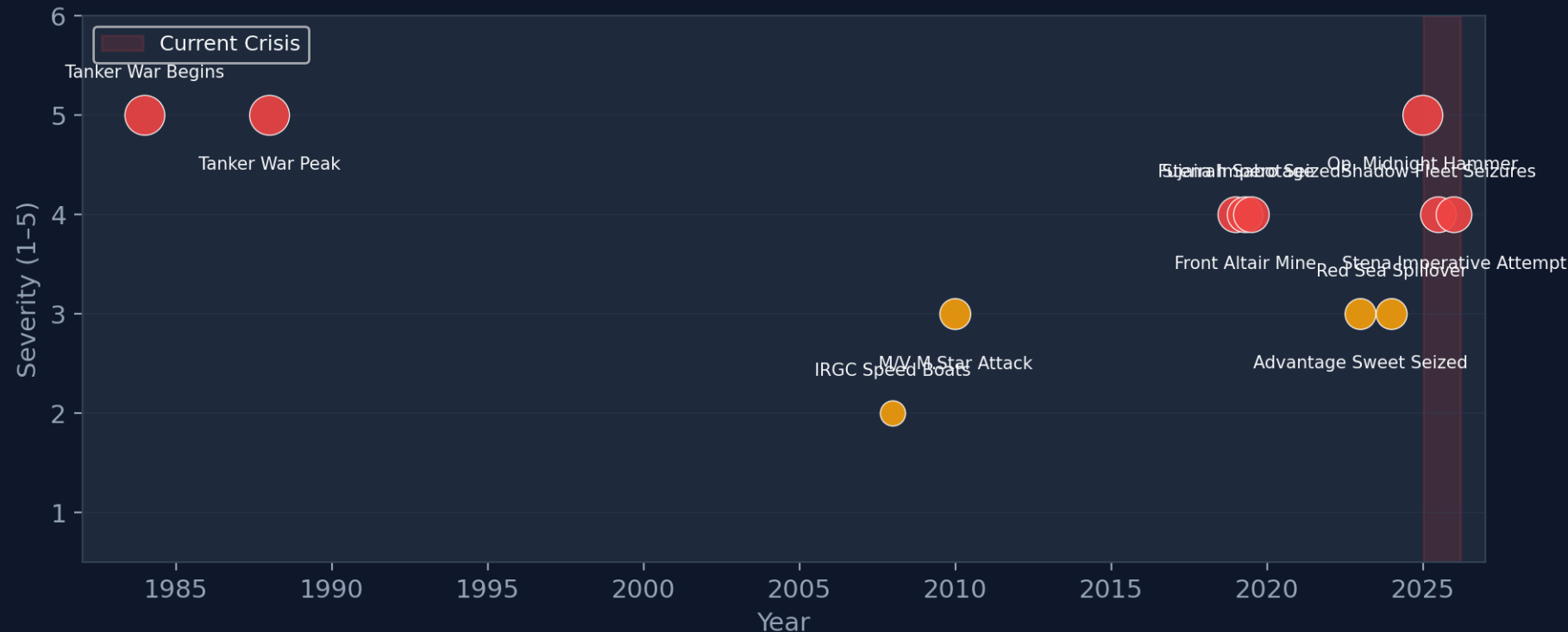
The most probable scenario (40%) is continued IRGC harassment producing 3–10 day delays per voyage. Limited conflict (20–25%) could mean 14–45 day delays. Full blockade remains low-probability (5–10%) but has doubled since January 2026.

War risk insurance premiums have surged to 0.35–0.5% of hull value. VLCC charter rates have approximately doubled. Brent crude surged toward \$70/bbl following the Aquila II seizure.

Historical Disruption Timeline

45 years of Strait of Hormuz incidents by severity — clear escalation pattern from 2019

Strait of Hormuz — Historical Disruption Timeline (1980-2026)



Tanker Transit Volume Forecast

Weekly transits through the Strait — actual data & three scenario projections

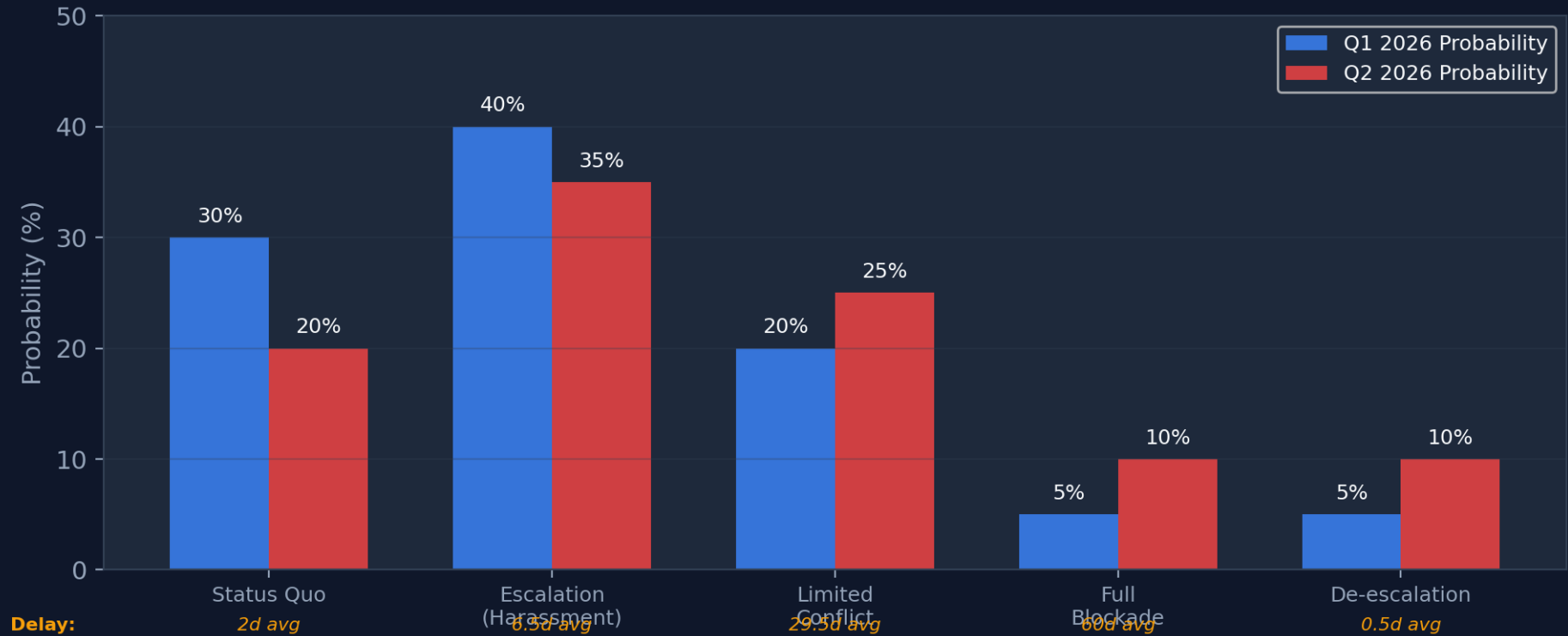
Tanker Transit Volume — Actual & Forecast (Q1-Q2 2026)



Scenario-Based Delay Forecast

Five scenarios with Q1 vs Q2 probabilities — expected delay rises from 5.6 to 7.8 days

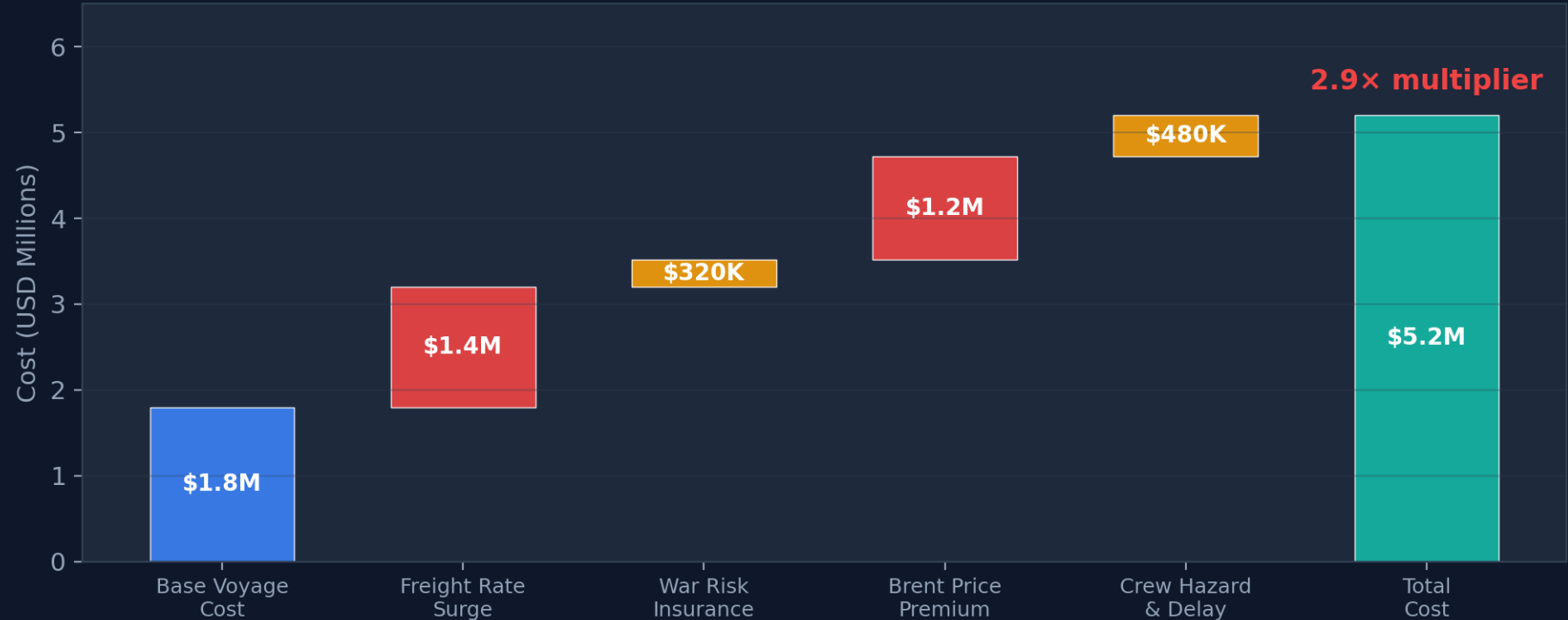
Scenario-Based Delay Forecast — Q1 vs Q2 2026



Per-Voyage Cost Impact

VLCC cost waterfall under Escalation scenario — \$1.8M base rises to \$5.2M (2.9× multiplier)

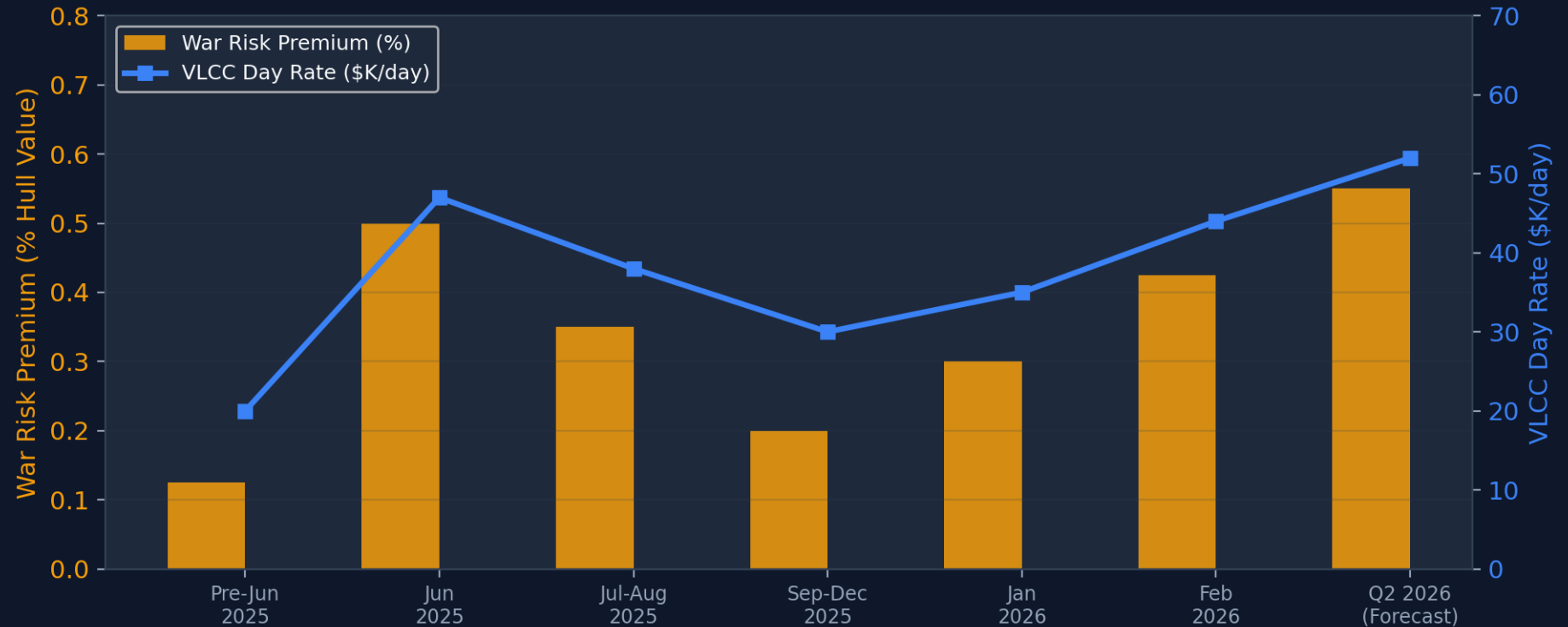
Per-Voyage Cost Waterfall — VLCC Through Strait of Hormuz



Insurance & Freight Rate Trajectory

War risk premiums 4× pre-crisis levels — VLCC rates forecast to reach \$50–55K/day by Q2

War Risk Insurance Premium & VLCC Day Rate Trajectory



Key Recommendations

- 1 Diversify feedstock sourcing away from Hormuz-dependent grades.** Increase procurement from West Africa, Brazil, US Gulf Coast.
- 2 Negotiate fleet war risk insurance proactively.** Lock in multi-voyage policies before premiums exceed 0.5%.
- 3 Build strategic crude buffer inventory.** Increase on-site storage to 15–21 days supply (from 7–10 days).
- 4 Activate Fujairah bypass routing.** Shift UAE-origin crude to Fujairah-loaded cargoes via Abu Dhabi pipeline.
- 5 Implement real-time tanker tracking.** Subscribe to Vortexa, Kpler, Sea/live for AIS tracking & early warnings.
- 6 Prepare contingency carrier contracts.** Standby charters with non-US-flagged carriers; war risk cost-sharing clauses.
- 7 Model CBAM cost of rerouting.** Cape of Good Hope adds 8–12 days — factor emissions & CBAM impact.
- 8 Scenario-plan for Q2 tail risk.** Operational playbook for Limited Conflict (14–45 day delays).

Next Steps

Convene an emergency supply chain risk review within the next 10 days:

- Assess feedstock diversification options & alternative sourcing
- Execute insurance renegotiation strategy before next escalation
- Set buffer inventory targets for priority blending facilities
- Develop operational playbook for Limited Conflict scenario