



**Massachusetts Bay
Transportation Authority**

Energy Hedge – FY26

MBTA Board of Directors Meeting

January 23, 2025

Patrick Landers, Treasurer

Diesel Fuel Hedge Background

- MBTA has historically hedged the costs of its diesel fuel to minimize expenditure volatility and to provide greater certainty in budgeting.
- Since 2001, the hedging of fuel costs has been through the use of derivative contracts, which is more efficient than a price-fix with the vendor contract.
- To diversify risk among counterparties and ensure competitive bids, the MBTA has put in place a master hedge for specific amounts and terms.

Past counterparties include

JP Morgan
Citibank
Bank of America – Merrill Lynch
Morgan Stanley
Goldman Sachs
Wells Fargo

WHAT A FUEL HEDGE IS	WHAT A FUEL HEDGE IS NOT
<ul style="list-style-type: none">✓ A method of reducing budgetary uncertainty✓ A tool to protect MBTA finances from fuel price volatility✓ A neutral posture with 50% hedged 50% unhedged positions (<i>If fuel prices go down, we benefit at the pump. If fuel prices go up, we benefit on the hedge.</i>)	<ul style="list-style-type: none">✗ An opportunity for MBTA to outsmart the market✗ A tool to take advantage of market conditions✗ A gamble with the banks



How a Hedge Works

PHYSICAL DELIVERY



\$3 a gallon
Price falls to \$2.85



\$0.05 Distribution Cost



\$3.05 a gallon
Price now \$2.90
(\$0.15 savings)

Price drops \$0.15
at pump

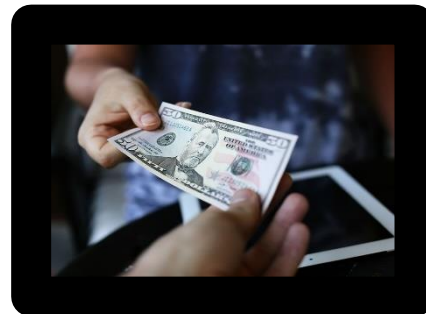


$$-\$0.15 + \$0.15 = \$0$$

HEDGE



Lock in rate at \$3 a gallon



If price goes up, Bank pays MBTA
If prices go down, MBTA pays Bank



Futures decline to \$2.85
(MBTA pays difference)

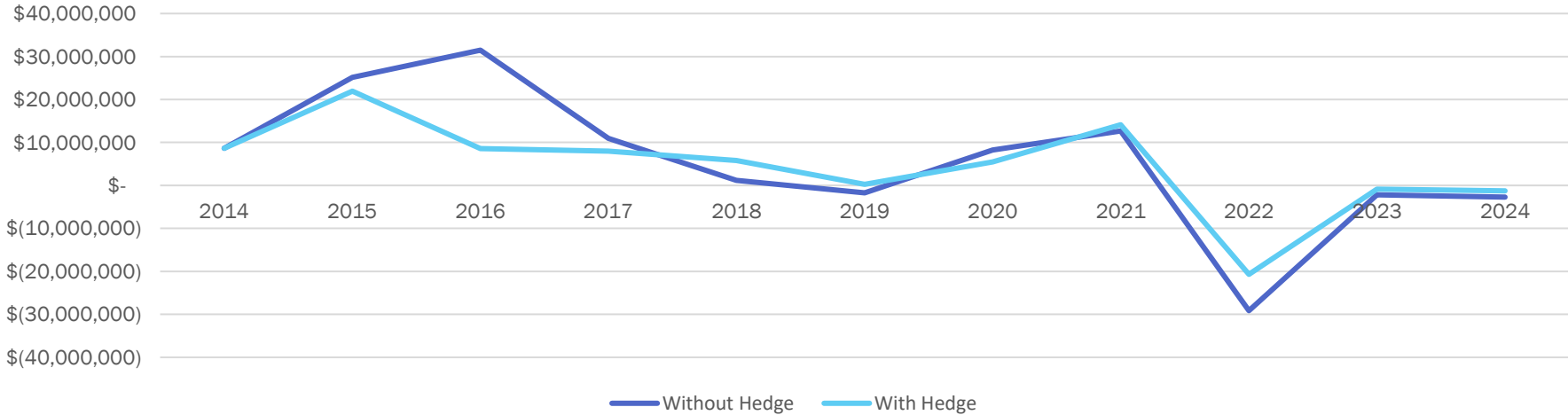
The result of
changes in the
price of Oil Futures

Recent Hedging

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025 YTD
Targeted percentage hedged	90%	75%	50%	37%	50%	50%	50%	50%	50%	50%
Gallons hedged	18.7 million	15.7 million	10.3 million	8.1 million	8.8 million	9.9 million	8.8 million	9.95 million	9.83 million	10.6 million
Providers	Citi, Morgan Stanley, Bank of America	Citi, JP Morgan	Citi, Morgan Stanley	Goldman	Goldman	Wells Fargo	Morgan Stanley	Morgan Stanley, Citi, Goldman	Morgan Stanley, Citi, Goldman, Bank of America	Citi, BAML, Morgan Stanley
Hedged Price Per Gallon	\$2.50	\$1.79	\$1.51	\$1.71	\$1.85	\$1.29	\$1.99	\$3.24	\$2.63	\$2.49

The MBTA hedges its diesel usage every year. The amount hedged varies each year, but the hedge must be for a specific volume of fuel for a specific term.

Budgetary variance - Dampening effect of Fuel Hedge

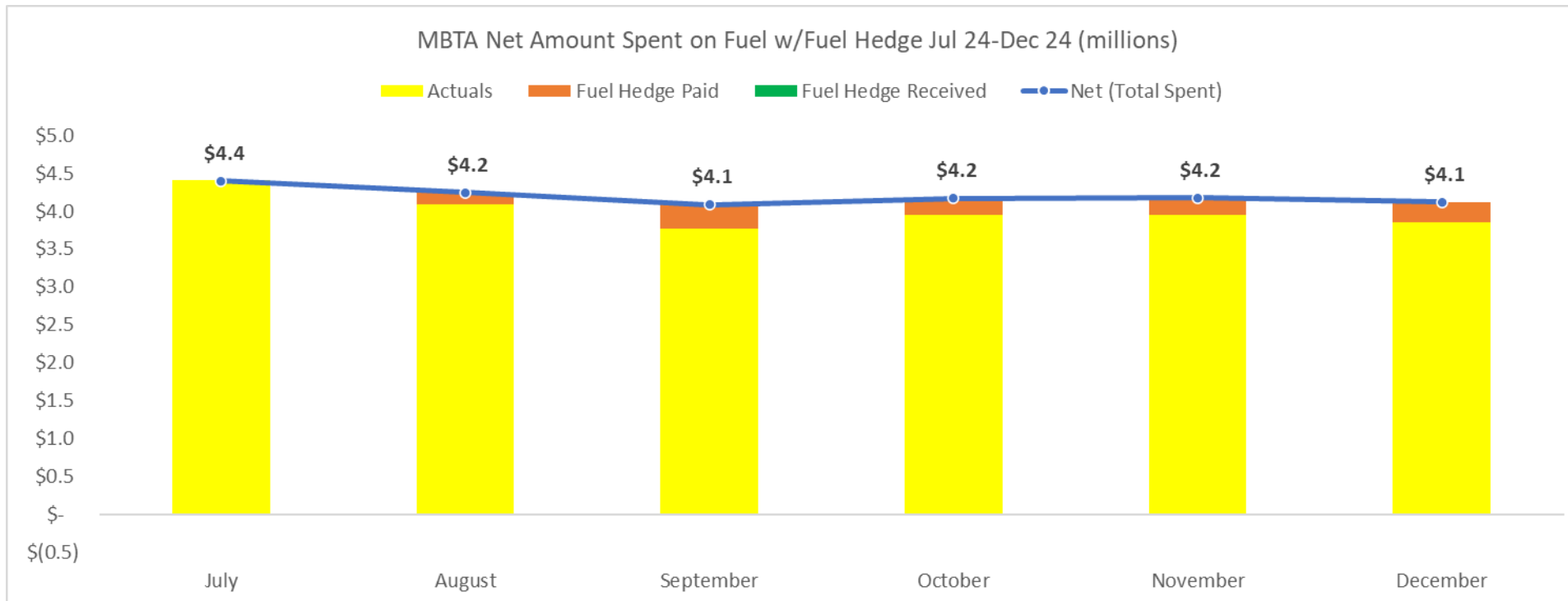


The hedge for the first half of FY 25 reduced variance from \$12.2M to \$6.1M.



FY25 Fuel Hedge

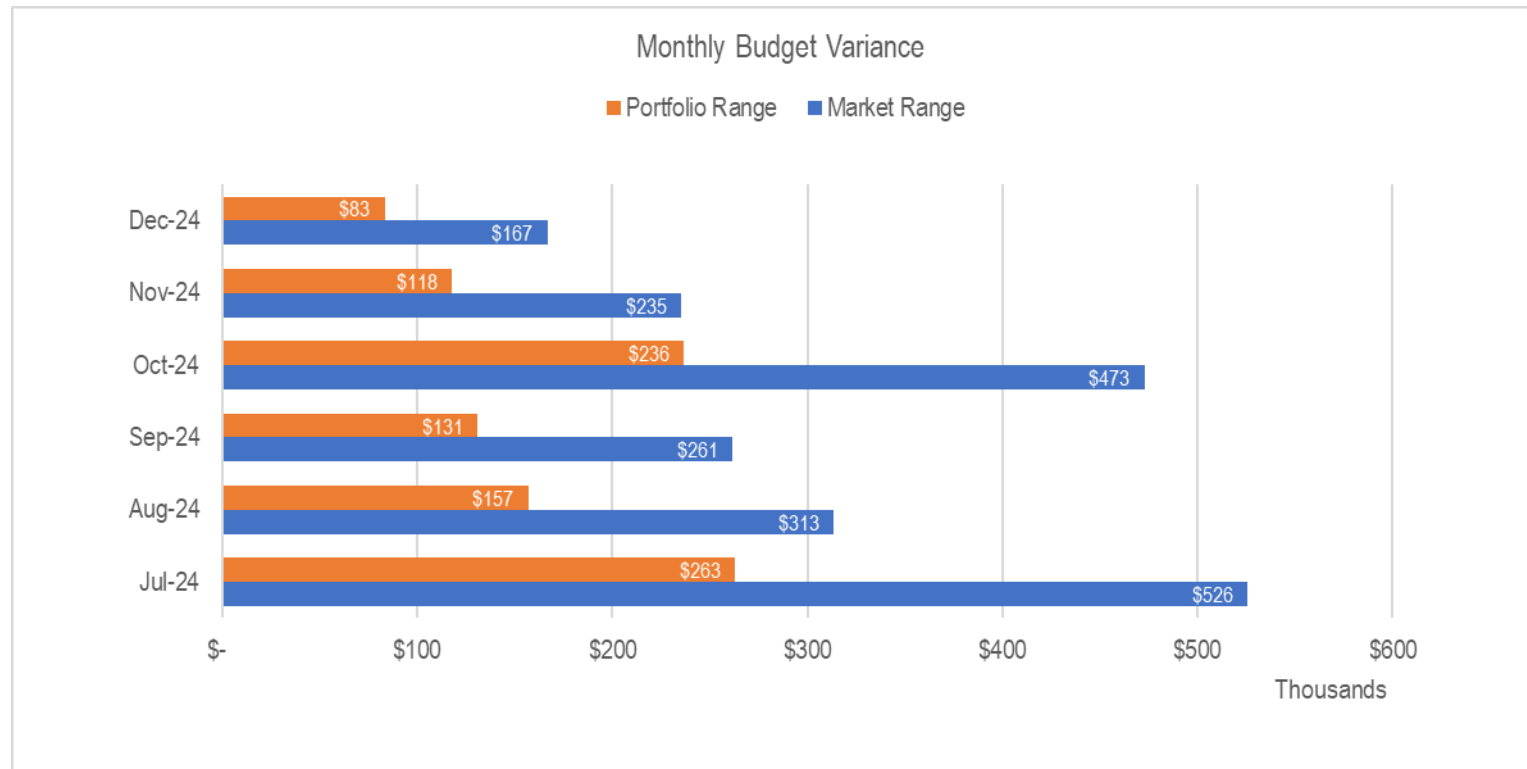
- The MBTA is currently hedging ~50% of its budgeted usage (10.6 million gallons).
- Weighted average price of \$2.49 per gallon
- Hedge counterparties – Morgan Stanley, Bank of America, and Citi
- A 50% hedge performs when price per gallon increases. The remaining 50% unhedged portion performs when price per gallon decreases.



Yellow is what was paid at the pump (actual)
Red/green represents fuel hedge. Red is a payment we made to the counterparty. Green is a payment we received from the counterparty.
Blue line represents what MBTA actually paid on fuel (hedge and pump prices combined)

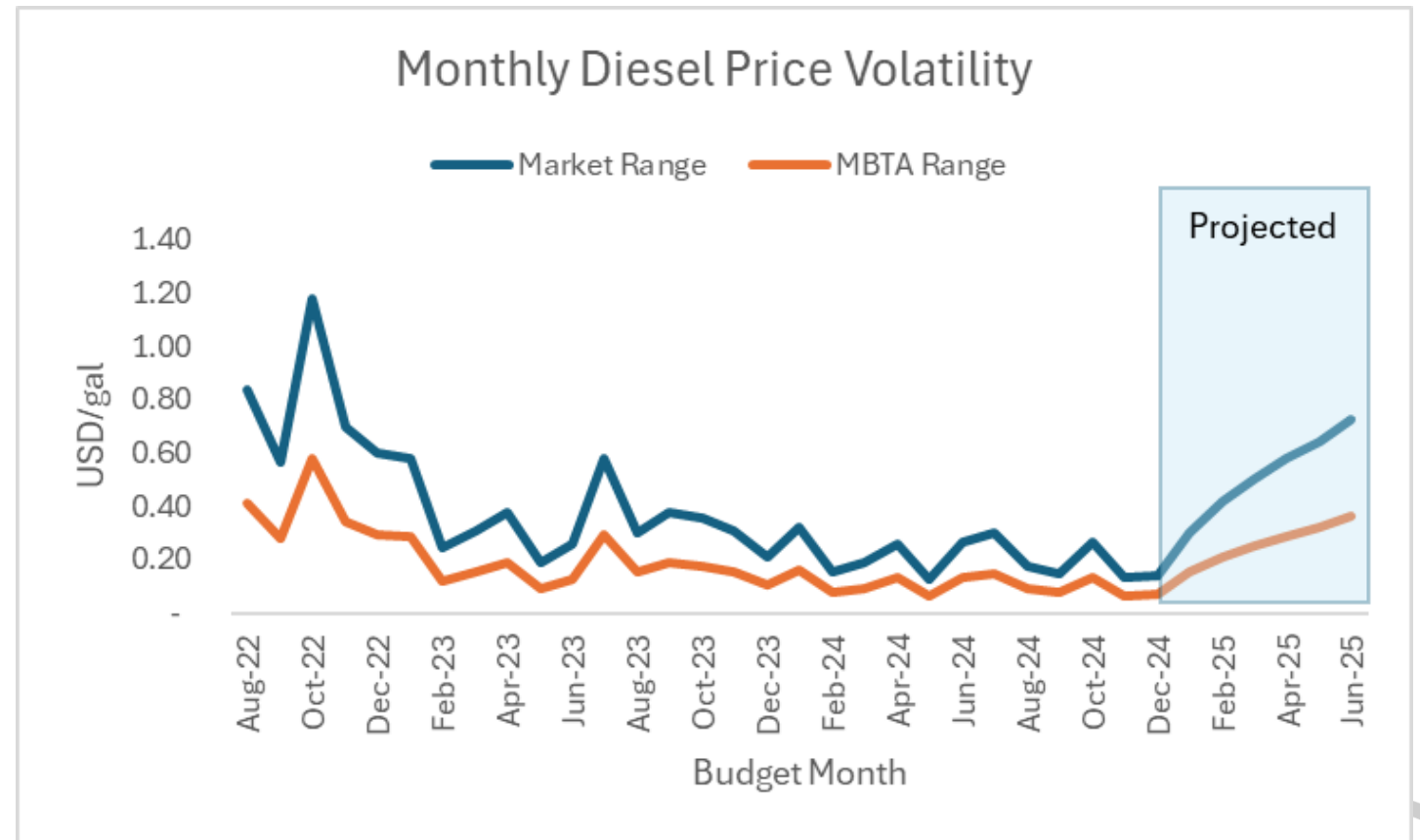
FY25 Fuel Hedge

- Volatility has normalized, trading in the mid-20% range, compared to mid-30s this time last year.
- Hedge has been on target for reducing volatility in realized costs by 50%.
- Calendar 2025 is expected to see volatility rise, with prices at their lowest starting point in three years.



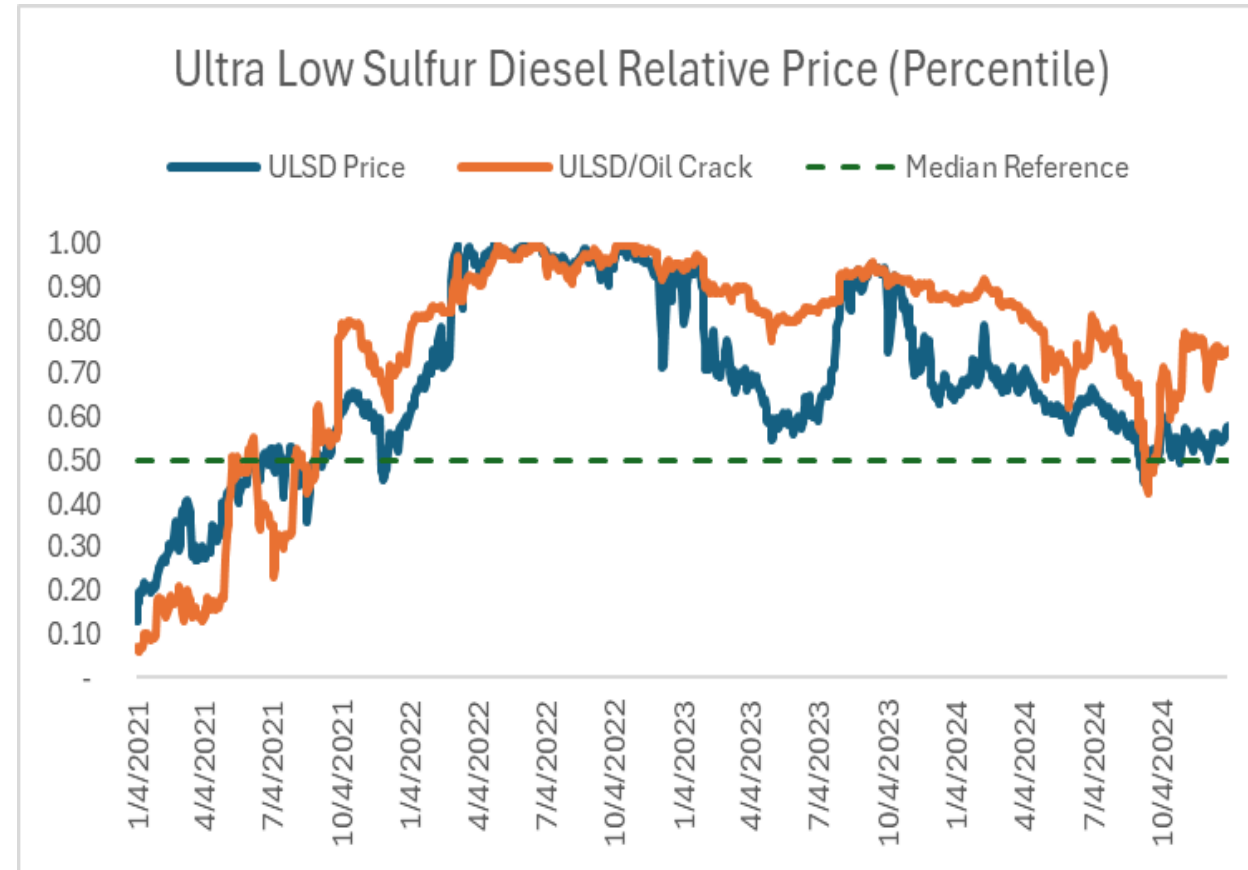
Historic Volatility

- Forward volatility is trading in the 28% range, roughly in line with realized volatility during Dec, but market participants are paying a modest premium for longer-term volatility (upward-sloping term structure). This is normal compared to recent years, with drastic near-term impacts of conflicts.
- At the current price of \$2.35, 30% vol is +/- \$1.28/gal (\$1.60-\$2.90)



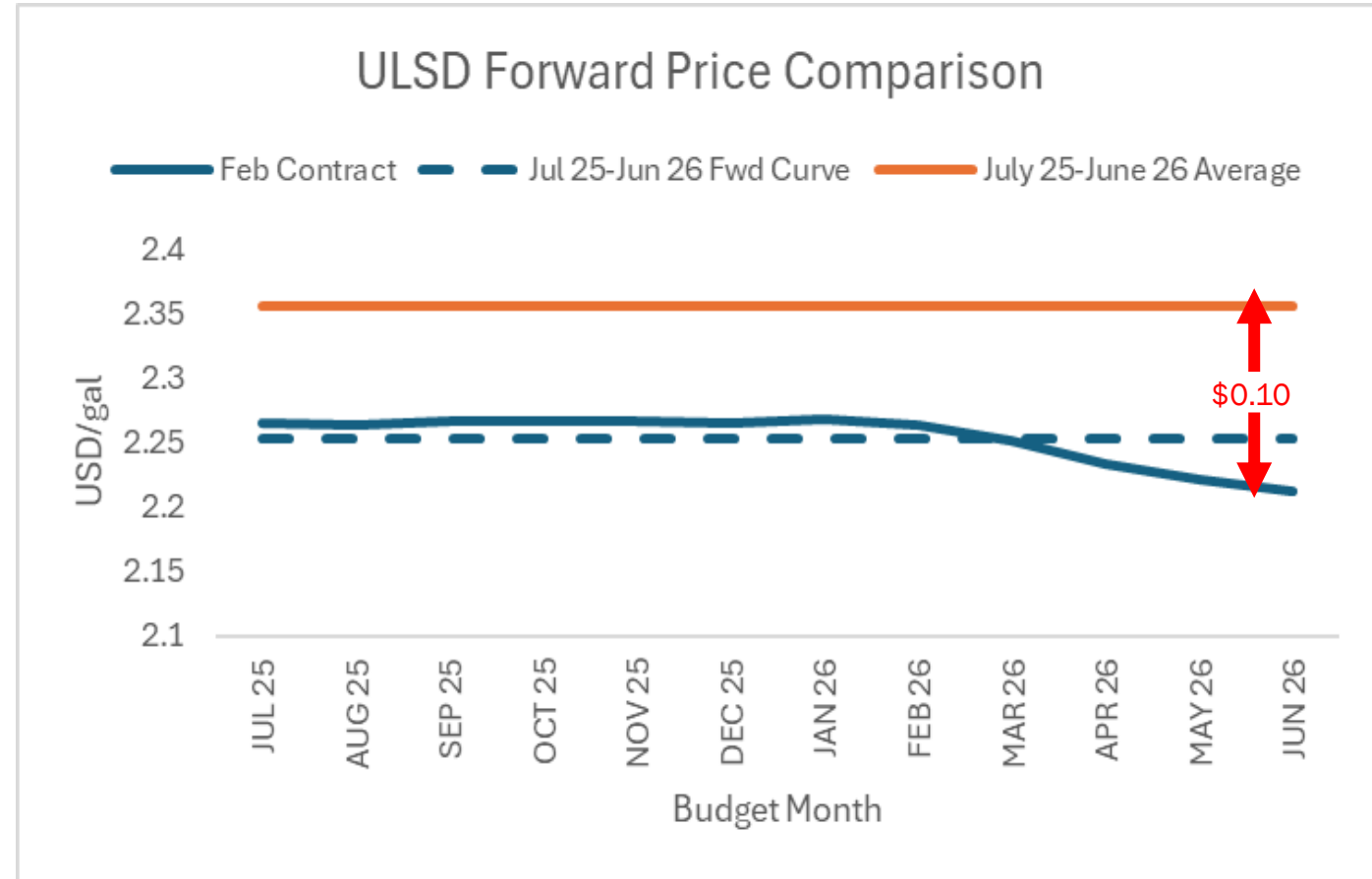
2025 Positioned for Volatility Rebound

- 2024 capped reversion to mean from 2022 spike
 - Prices ended 2024 close to the 10-yr median
 - The supply chain has adjusted to known risks
 - Global oil markets better balanced than feared
- 2025 is expected to see periodic spikes in volatility, with upside price bias.
 - Forward volatility trades at a historically high premium to current
 - Forward volatility skewed to upside risks
 - A narrower range of expected risks with conflicts stagnate, but higher costs to deliver
 - Persistently high diesel margin over crude oil (“crack spread”) historically indicative of rising volatility.



Ultra Low Sulfur Diesel Forward Price Comparison

- ULSD for delivery in February = ~\$2.35/gal
- The forward average for Jul 25-Jun 26 = ~\$2.25/gal
- Fwd prices tend to trade at a discount when the market is tight
- A discounted forward price offers incentives to plan ahead
- currently \$0.10 lower per gallon
- The shallower discount is indicative of a more balanced market, although with higher uncertainty.



Proposed FY26 Fuel Hedge

Recommendation

- Execute a forward-starting hedge so that the hedge and budgeted amount are determined at the same time.
- Based on historic usage and projected ridership, the MBTA is budgeting for approximately 23 million gallons in fuel purchases between its commuter rail and bus in FY26
- The MBTA is targeting a 50% hedge of its budgeted usage (11.5 million gallons). Unhedged the MBTA could be exposed to \$29.4 million in budgetary volatility based on expected volatility
- A 50% hedge would reduce potential budgetary volatility to \$14.7 million

Next Step

After MBTA receives board authorization, MBTA will enter into a competitive bid process run by Blue Lacy (MBTA's hedge advisor). The bank will be chosen based on price and the provider's credit rating.



Requested Vote

VOTED:

To authorize either the Chief Financial Officer or Treasurer of the Massachusetts Bay Transportation Authority ("MBTA"):

- to enter into one or more hedges, with terms expiring no later than June 30, 2026, as determined to be necessary or appropriate, to hedge the MBTA's financial risks related to the price of diesel fuel, provided that such hedges shall be procured via competitive bid process; and
- to execute any and all documents, certificates and other instruments necessary or desirable to effectuate the transactions contemplated by the foregoing vote.

