



**Massachusetts Bay  
Transportation Authority**

# Energy Hedge – FY23

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MBTA Audit & Finance Committee

May 12, 2022

Finance Team

# 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 rather than a cap within the vendor contract.
- To diversify risk among counterparties and ensure competitive bids, the MBTA has historically 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"> <li>✓ A method of reducing budgetary uncertainty</li> <li>✓ A tool to protect MBTA finances from fuel price volatility</li> <li>✓ A win-win (<i>If fuel prices go down, we win at the pump. If fuel prices go up, we win on the hedge.</i>)</li> </ul>	<ul style="list-style-type: none"> <li>✗ An opportunity for MBTA to outsmart the market</li> <li>✗ A tool to take advantage of market conditions</li> <li>✗ A gamble with the banks</li> </ul>

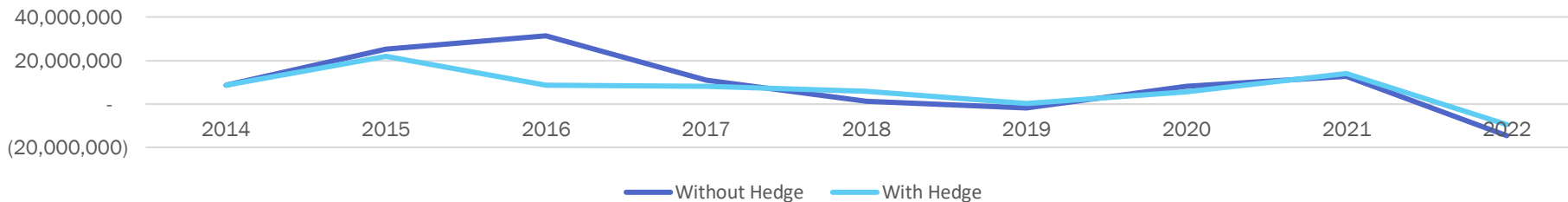


# Recent Hedging

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
<b>Targeted percentage hedged</b>	90%	75%	50%	37%	50%	50%	50%
<b>Gallons hedged</b>	18.7 million	15.7 million	10.3 million	8.1 million	8.8 million	9.9 million	8.8 million
<b>Providers</b>	Bank of America, Citi, Morgan Stanley	Citi, JP Morgan	Citi, Morgan Stanley	Goldman	Goldman	Wells Fargo	Morgan Stanley
<b>Hedged Price Per Gallon</b>	\$2.50	\$1.79	\$1.51	\$1.71	\$1.85	\$1.29	\$1.99

- The MBTA hedges its diesel usage every year. The amount hedged varies each year, but the hedge has to be for a specific volume of fuel for a specific term.
- In some years, the MBTA enters into agreements with multiple providers.

Budgetary variance - Dampening effect of Fuel Hedge



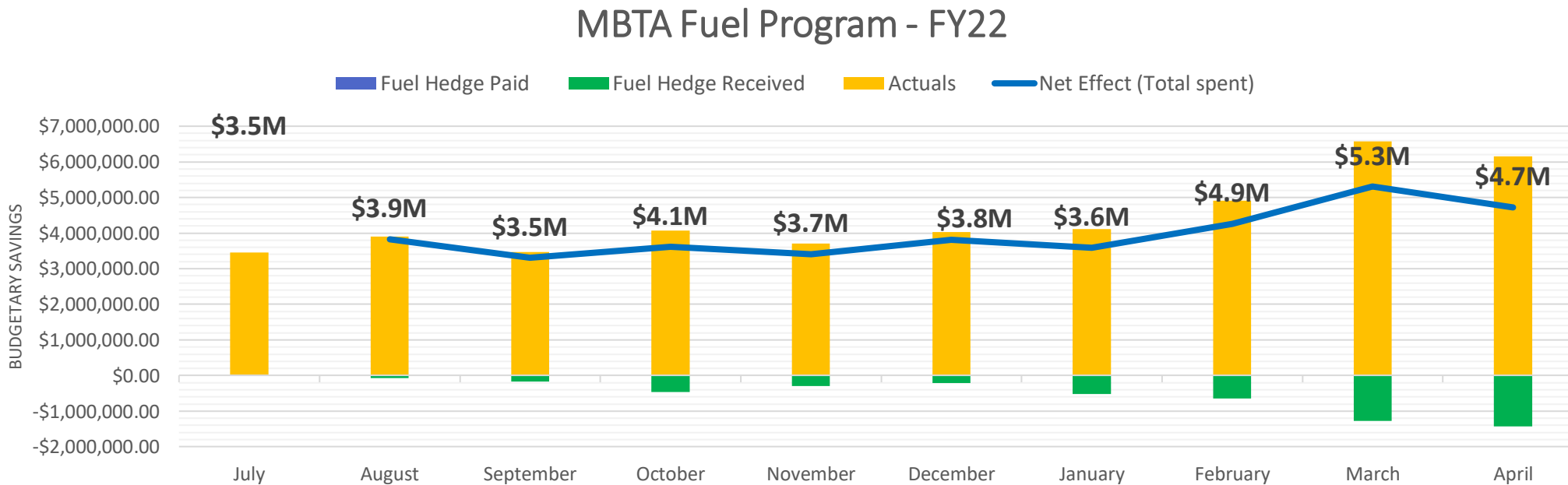
*Without the fuel hedge, standard deviation is 1.5x higher (\$12.17M vs. \$7.98M)*



# FY22 Fuel Hedge

- August 2021 through June 2022 fuel hedge contract
- Hedged roughly 50% of projected usage during normal times during 9-month period (8.84M Gallons)
- Entered a hedge with Morgan Stanley for \$1.9868 per gallon
- **Energy hedge has resulted in a net payments from our counterparty YTD of \$5 million.**

## MBTA Fuel Hedge VS Pump Price Variance (August 2021- May 2022)



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)

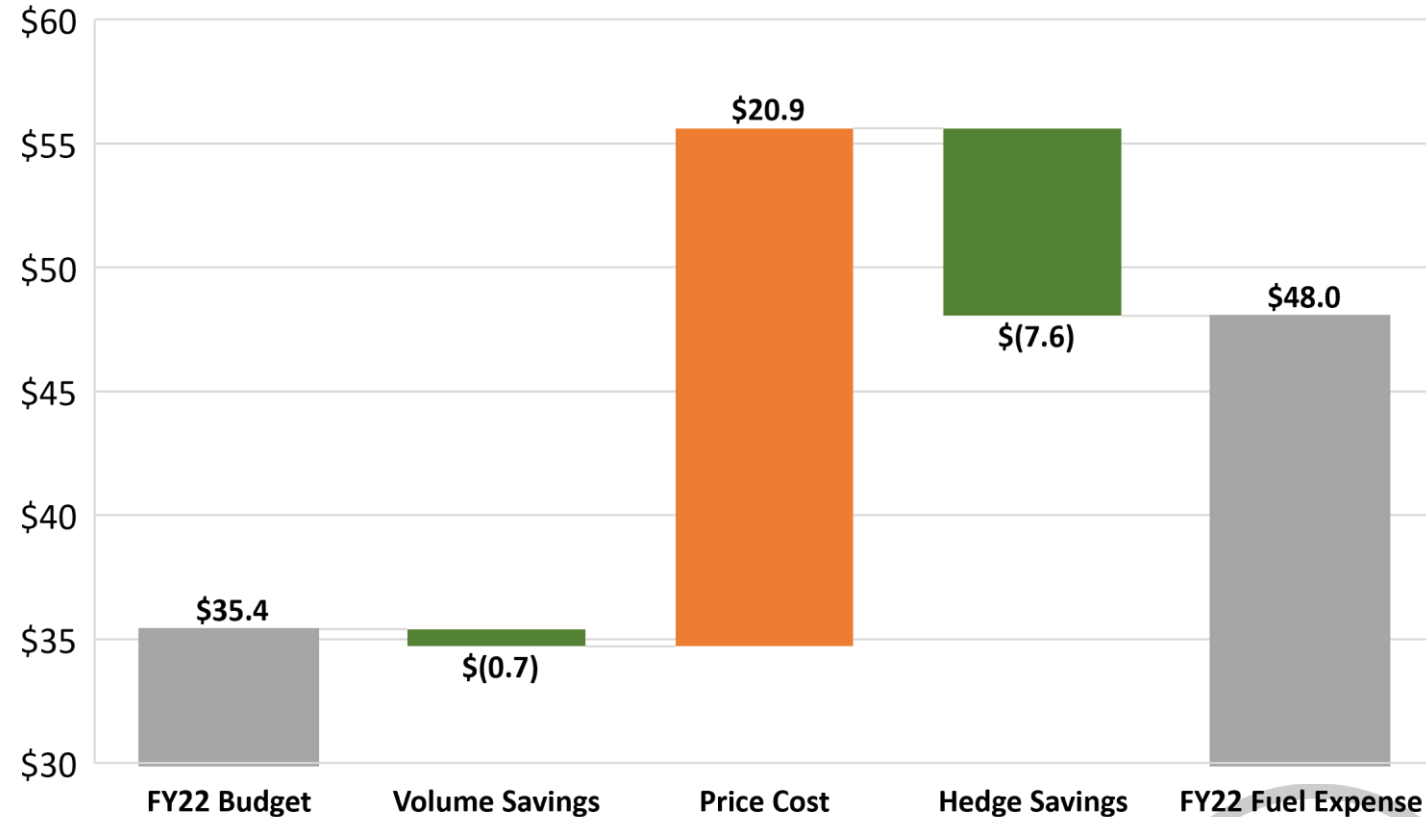
# FY22 Projected Diesel Fuel Costs

The Authority budgeted \$35.4 million for fuel in FY22. Due to market conditions causing the price of oil to rise, the Authority projects a total FY22 year-end cost of \$48 million.

The MBTA realized some savings through under-usage of projected gallons (\$0.7 million).

Additional fuel savings resulted from the fuel hedge, which netted \$5 million through April and is expected to net \$7.6 million by year-end.

FY22 Fuel Projection Bus & Commuter Rail  
YTD Mar Actual Apr-June Projected



# Current Market FY23 Fuel Hedge

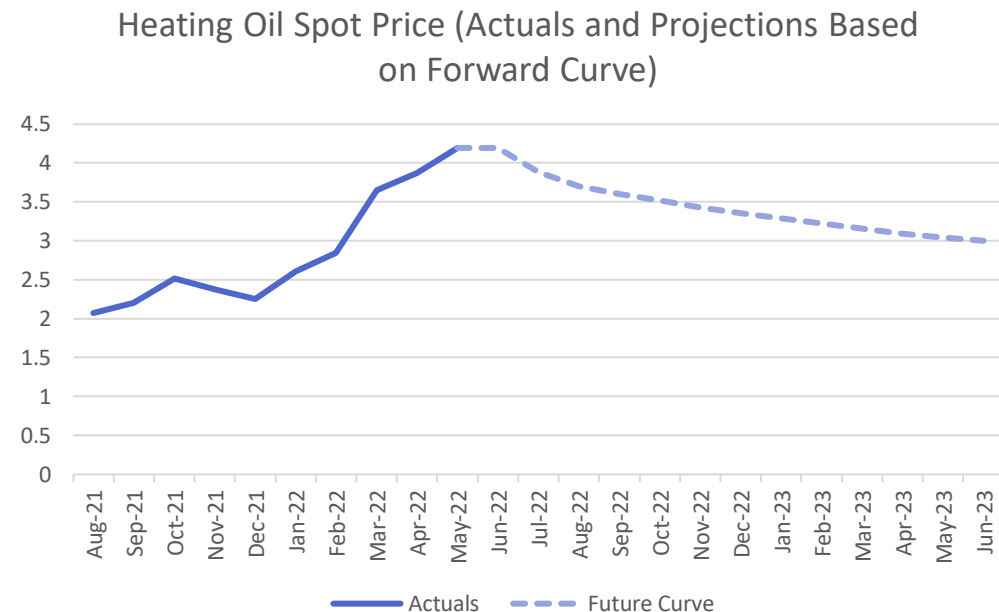
“The current market is unlike anything I have seen in my career. The volatility is intense. The market is disconnected from fundamentals in a way we have not seen before.”

- MBTA Conversation w/Commodities Desk

The ongoing situation in Ukraine and Russia, combined with other global events already in play, has led to steeping diesel prices since January 2022.

Price per gallon on Heating Oil has increased to \$3.87 in April from \$2.07 in August (an 87% increase).

The Forward Curve indicates a market expectation that fuel prices will moderate throughout FY23. The Authority will be monitoring the market closely for opportunities to bid the fuel hedge.



# Proposed FY23 Fuel Hedge

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## **Recommendation**

- Based on historic usage, adjusted for the pandemic, the MBTA is budgeting for 19.68 million gallons in fuel purchases between its commuter rail and bus in FY23
- The MBTA is proposing to hedge 50% of its budgeted usage (9.8 million gallons). Unhedged the MBTA could be exposed to \$17-\$34 million (one-to-two standard deviations) in budgetary volatility based on an analysis of historic price changes
- A 50% hedge would reduce potential budgetary volatility to \$8.5-\$17 million (one-to-two standard deviations)
- A 50% hedge performs when price per gallon increases. The remaining 50% unhedged portion performs when price per gallon decreases.

## **Next Step**

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



# Requested Vote

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## **VOTED:**

To authorize 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, 2023, 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 shall hedge not more than 10 million gallons; and
- to execute any and all documents, certificates and other instruments necessary or desirable to effectuate the transactions contemplated by the foregoing vote.

