Derivatives Portfolio Report

MTA Finance Department
Patrick J. McCoy, Director
October 21, 2019

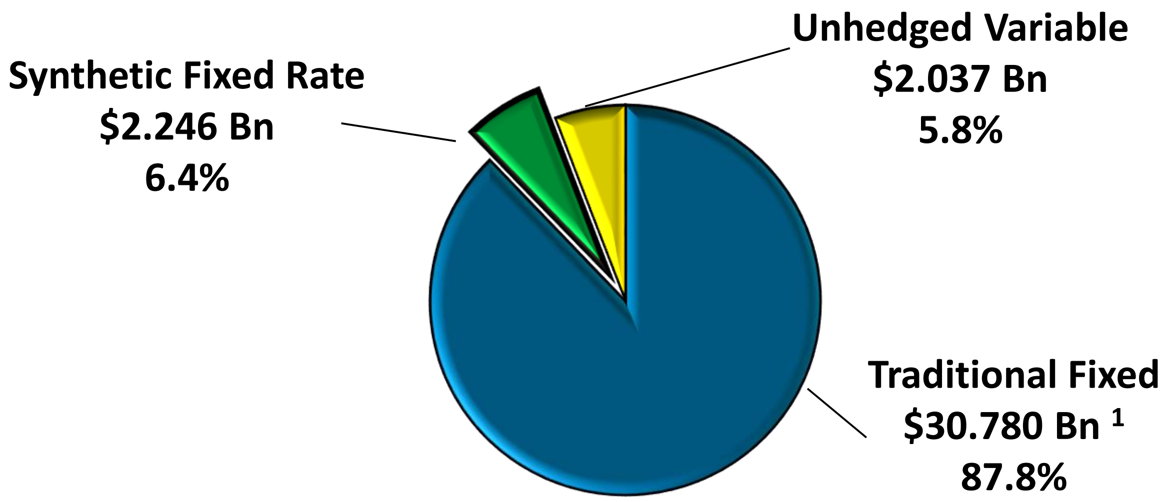
MTA's derivatives program reduces budget risk by employing interest rate and fuel hedging strategies

- MTA's synthetic fixed rate portfolio remains low cost
- $2.2 billion notional with 8 counterparties
  - Executed 2001 thru 2007
  - Weighted average synthetic fixed rate of 4.16%

- MTA's fuel hedging program mitigates budget risk by dollar cost averaging half of our ultra-low sulfur diesel ("ULSD") expenses
  - 23 hedges with 4 counterparties
  - Final maturity 2021
  - Average locked in rate for the next 12 months is $2.06

Interest Rate Swaps

MTA's debt portfolio is designed to manage budget volatility while maintaining a low cost of capital



- Interest rate exposure is managed through a combination of low cost synthetic fixed rate, fixed rate portfolio management through refundings and reasonable level of floating rate debt
- Exposure to liquidity events is manageable with a total variable rate debt load of $4.282 billion allocated between bank facilities and FRNs

Note: As of October 1, 2019 and excludes Special Obligation Bonds and Hudson Rail Yard Obligations.
[1] Excludes Put Bonds and BANs.

Outstanding synthetic fixed rate debt is declining and remains low cost

- The weighted average cost of the synthetic fixed rate portfolio is 4.16% (including fees, excluding benefit of up-front payments)
- Synthetic fixed rate exposure continues to be manageable
- Mark-to-Market values do not impact capital or operating budgeting
- Remaining weighted average life of 9.4 years

Outstanding counterparty exposure is manageable across strong counterparties

Swap Counterparty	Ratings Moody's/S&P/Fitch 2018[(1)]	2019[(1)]	Notional Amount ($000) 2018[(1)]	2019[(1)]	% of Total Notional 2018[(1)]	2019[(1)]	MTM (mid) 2018[(1)]	2019[(1)]
AIG Financial Products Corp.[2]	Baa1/BBB+/BBB+	Baa1/BBB+/BBB+	$95,175	$91,465	4	4	($12,149)	($19,601)
BNP Paribas US Wholesale Holdings, Corp.[3]	Aa3/A/A+	Aa3/A+/A+	190,300	189,300	8	8	(19,382)	(37,400)
Citibank, N.A.	A1/A+/A+	Aa3/A+/A+	190,300	189,300	8	8	(19,382)	(37,400)
JPMorgan Chase Bank, N.A.	Aa3/A+/AA	Aa2/A+/AA	758,600	746,075	33	33	(132,078)	(215,501)
The Bank of New York Mellon	Aa2/AA-/AA	Aa2/AA-/AA	326,860	324,670	14	14	(30,593)	(50,486)
UBS AG	Aa3/A+/AA-	Aa3/A+/AA-	475,825	463,695	21	21	(55,828)	(96,202)
US Bank, N.A.	A1/AA-/AA-	A1/AA-/AA-	130,088	120,588	6	5	(10,485)	(15,465)
Wells Fargo Bank, N.A.	Aa2/A+/AA-	Aa2/A+/AA-	130,088	120,588	6	5	(10,485)	(15,465)
Total			**$2,297,235**	**$2,245,680**			**($290,380)**	**($487,519)**

- MTA continues to seek novation opportunities to increase counterparty credit strength and/or improve economic and credit terms

[1] Data from Mohanty Gargiulo LLC Interest Swap Portfolio Reports dated 9/28/2018 and 9/30/2019.
[2] Guaranteed by AIG Inc. (AIG Financial Products Corp. parent company).
[3] Guaranteed by BNP Paribas.
Totals may not add due to rounding.

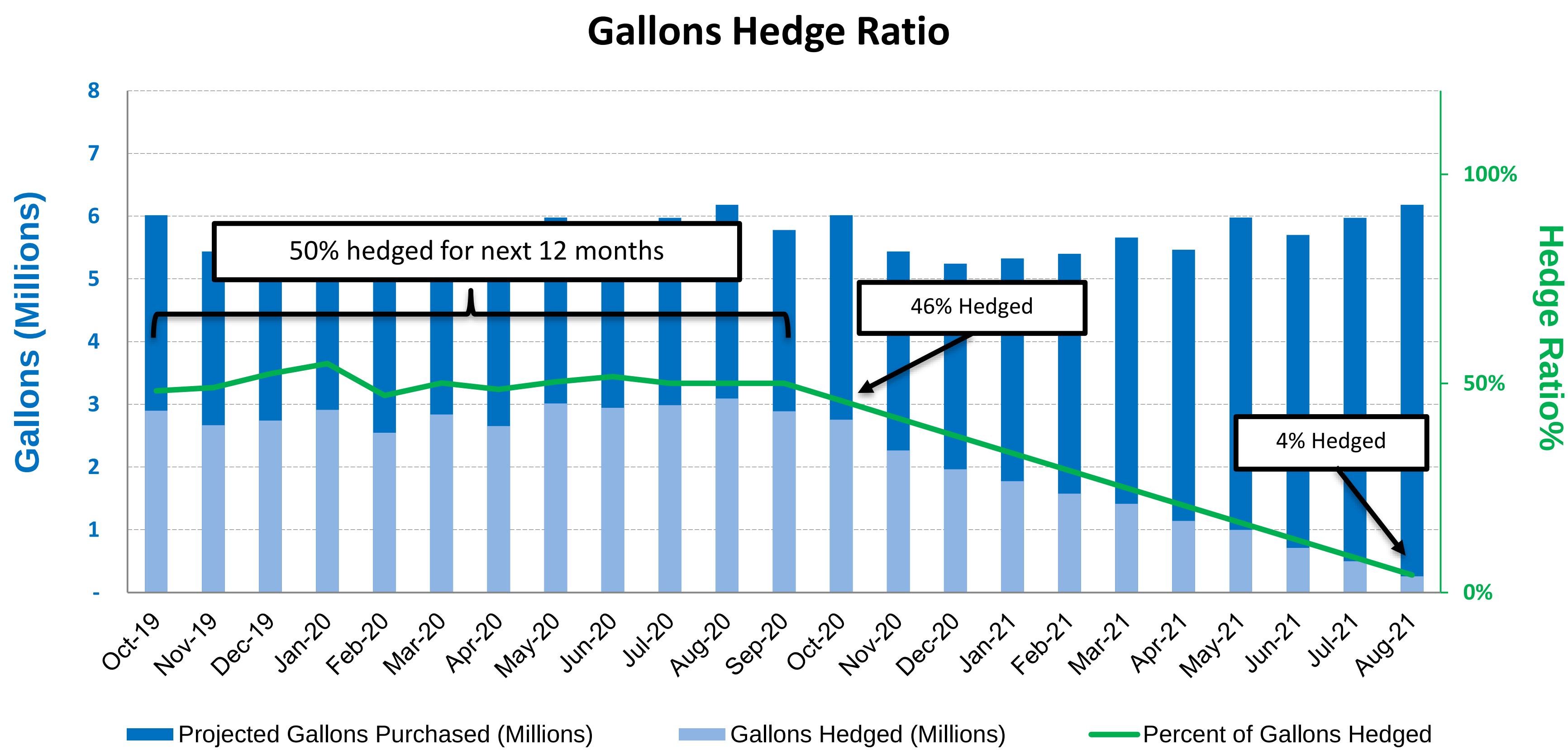
Fuel Hedging Program

MTA hedges 50% of its fuel costs to protect ULSD budget from volatility

- Currently hedging 50% of annual ultra-low sulfur diesel (“ULSD”) expenditures pursuant to existing Board Authorization in September 2012

- Hedges are procured through a competitive bidding process with pre-approved counterparties:
  - J. Aron & Company (26,070,664 gallons hedged)
  - Merrill Lynch Commodities Inc. (10,799,744 gallons hedged)
  - Cargill (8,481,071 gallons hedged)
  - Macquarie Energy LLC (4,177,130 gallons hedged)

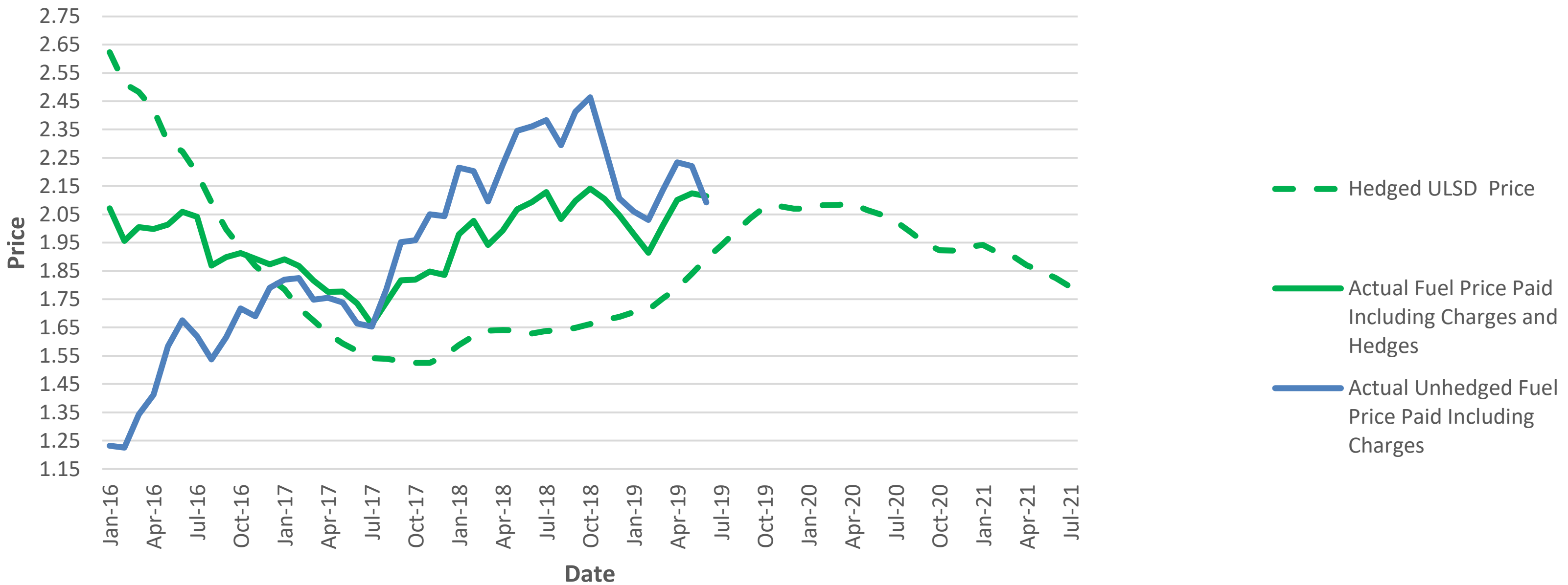
Current portfolio hedges 50% of the next 12 months of projected fuel purchases laddered in over time



- The goal of the program is to be 50% hedged for the next 12 months.
- Hedges are entered into monthly for roughly 4% of the projected fuel purchases expected to occur 13-24 months from each hedge execution date.

Hedge program provides budget stability while protecting against commodity price spikes

- Executing monthly forward hedges results in deferring the impact of major market moves in any current budget year by shifting them 12 months forward into future budgets
- With limited resources to protect the budget from negative volatility this strategy will reduce the immediate impact of potential spikes in fuel prices



- Sometimes this will result in not realizing the full effect of lower prices in a budget year, as was the case in 2016.
- But we do realize the benefit of falling prices in future years, e.g., second-half 2017 and in 2018.

Appendix

Interest Rate Derivative Contract Bond Allocation

Interest Rate Derivative Contract Bond Allocation

Issue	Bond Series	Par Amount ($Mn)	Fixed Rate Paid (%)	Variable Rate Index Received	Maturity Date	MTM Values ($Mn)
Transportation Revenue						
	2002D-2	$200.00	4.450%	69% 1-Month LIBOR	November 1, 2032	($77.042)
	2002G-1[1]	112.73	3.520	67% 1-Month LIBOR	January 1, 2030	(9.029)
	2005D & 2005E	365.86	3.561	67% 1-Month LIBOR	November 1, 2035	(78.403)
	2011B[1]	84.52	3.520	67% 1-Month LIBOR	January 1, 2030	(17.374)
	2012G	356.78	3.563	67% 1-Month LIBOR	November 1, 2032	(101.060)
	Total	$1,119.89				($282.908)
Dedicated Tax Fund						
	2008A	$324.67	3.316	67% 1-Month LIBOR	November 1, 2031	($50.486)
	Total	$324.67				($50.486)
Bridges and Tunnels --General Revenue						
	2001C	$21.28	3.520	67% 1-Month LIBOR	January 1, 2030	($1.495)
	2002F& 2003B	189.30	3.076	67% 1-Month LIBOR	January 1, 2032	(37.400)
	2005A	22.65	3.520	67% 1-Month LIBOR	January 1, 2030	(3.032)
	2005B	567.90	3.076	67% 1-Month LIBOR	January 1, 2032	(112.200)
	Total	$801.13				($154.127)

Notes: Data for derivative contracts outstanding as of 9/30/19.
Totals may not add due to rounding.
[1] Associated swap is with TBTA.