

Bus Fleet Strategy



Matt Dake and Brian Funk Transportation Committee December 10, 2018





Fleet Plan Objectives

 Goal is to have a near-term strategic framework for future bus procurements with the ultimate goal of moving to full electrification

Replace existing fleet and expansion fleet

 Introduce a sufficient number of 40' and 60' electric buses to evaluate in the Metro Transit service environment





C-Line Characteristics and Infrastructure Brooklyn Center Transit Center Transit

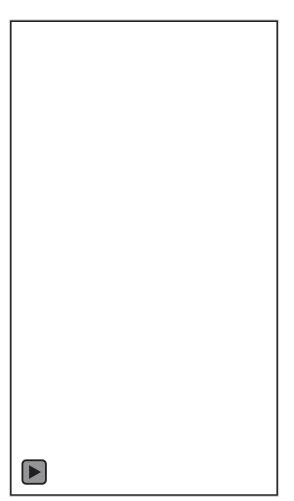
- Operate 7 days/week in one of Metro Transit's highest ridership corridors
- 17 mile round trip
- 8 Electric and 6 Diesel BRT 60' Buses
- 3 door boarding
- 8 Garage chargers at FTH
- 2 On-route chargers at BCTC







On-route charging - NYC MTA Example



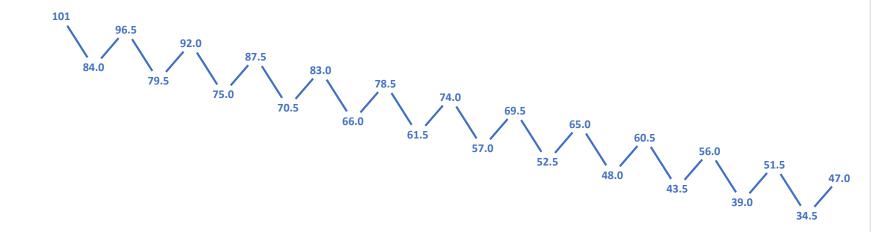






On-Route Charging Characteristics

ESTIMATED RANGE (W/12 MIN FAST CHARGE EACH TRIP)



	Start		1		2		3		4		5		6		7		8		9		10		11		12
— — Est. Range	101	84.0	96.5	79.5	92.0	75.0	87.5	70.5	83.0	66.0	78.5	61.5	74.0	57.0	69.5	52.5	65.0	48.0	60.5	43.5	56.0	39.0	51.5	34.5	47.0



Electric Bus Evaluation

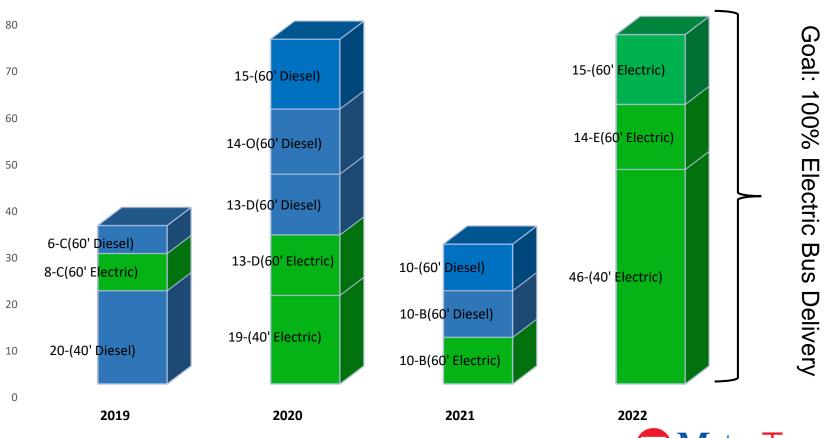
- Metro Transit is in a unique operational position of not having an immediate need for 40' buses and is positioned to gain a better understanding of fleet electrification
 - Procure and Test 19 electric 40' buses
 - Take a measured approach and thoroughly test in Metro Transit's local route service environment
 - Gain a better understanding of operating, infrastructure and training needs
- Metro Transit is implementing all future ABRT routes with a fleet of at least 50% electric buses
 - Procure and Test 30 electric 60' BRT buses
 - Learn the operational characteristics of on-route charging
 - The impact of 3 door bus operations in various weather conditions





Procurements 2019 - 2022







Procurement Strategy

- Issue a 40' Electric RFP
 - 19 electric 40' buses with 46 options
- Issue a 60' Electric and Diesel RFP
 - 30 electric 60' buses with 22 options
 - 62 diesel 60' buses with 22 options





2023 and 2024 Fleet Requirements

