



## Fare-Free Bus Pilot Evaluation

July 29, 2024

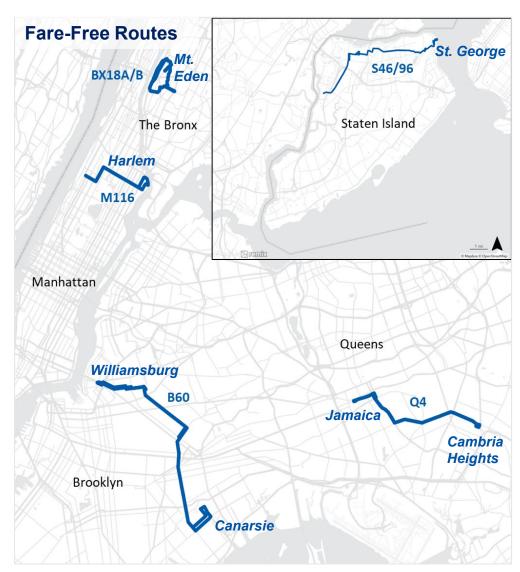
#### **About the Pilot**

The 2023 New York State budget mandated the MTA select and operate one bus route in each borough to be fare free for 6-12 months.

#### Our route selections considered:

- Equity for low income and disadvantaged communities, access to employment and commercial area(s)
- Existing route capacity, limited crowding conditions, service adequacy
- Minimal overlap with other MTA bus services
- Fare evasion levels

Pilot began September 24, 2023. Fare collection resumes on September 1, 2024.



#### **Evaluation Summary**

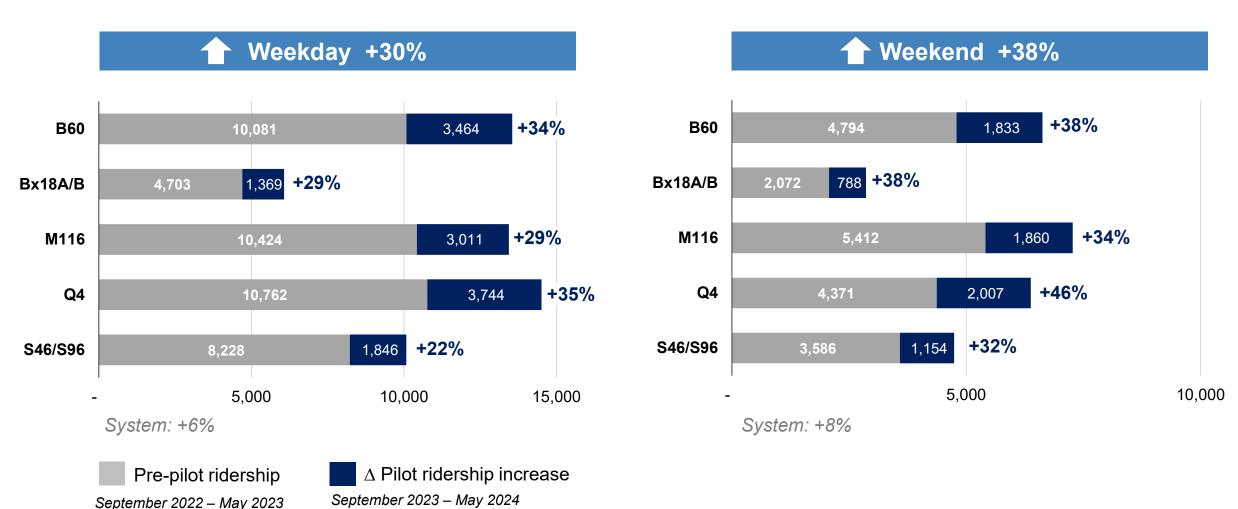
#### **Main Pilot findings:**

- 1. Ridership increased on all routes
- Limited new ridership: existing riders used the farefree routes more than new route riders
- 3. Service performance had mixed results
- 4. Fare evasion on nearby routes was consistent with systemwide rates
- 5. Foregone revenue and related costs amounted to more than \$12M over nine months of the Pilot



#### Ridership increased on all routes

#### **Pre-Pilot vs. Pilot Ridership Increases**



#### Limited new ridership: existing route riders took most of the new trips

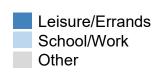
While 12% of riders were new to the route, existing riders used the route more frequently and drove ridership increases.

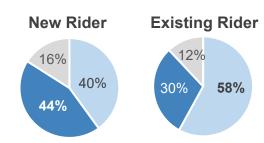
RODE 4+ DAYS PER WEEK



New riders were more likely to travel for errands and leisure, than for school or work.

TRIP PURPOSE





New riders and existing riders had similar income profiles.

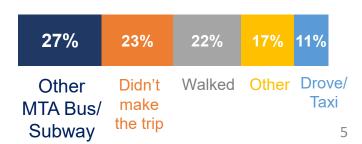






Pre-pilot, more than **one-quarter** of new riders **used other paid MTA bus and subway** service.

NEW RIDERS' PRE-PILOT MODE



#### Service performance metrics are mixed



Bus speeds decreased on fare-free routes and systemwide



**System** 





**Dwell times per route increased** more on pilot routes compared to the system







Customer journey time performance dipped more on pilot routes than systemwide







The rate of fare evasion on nearby routes was consistent with systemwide growth





#### Nine-month period represents a loss of over \$12 million

Farebox Revenue Loss	\$8.2 M
Farebox Revenue Loss on Nearby Services	\$1.3 M
Additional Access-A-Ride Impact (Revenue Loss + Cost of Additional Service)	\$1.7 M
One-Time & Upfront Costs	\$1.1 M

\$12.3 M

Represents September 2023 – May 2024

**Total** 

#### Next Steps

- Pilot concludes at the end of August. Customer communications will include on-bus notification that fare payment is resuming
- Focus efforts on targeted affordability that will improve access to transit services
- Continue implementing robust service enhancements
  - Queens and Brooklyn Bus Network Redesigns
  - Service enhancements on select subway lines



# Additional Metrics for Pilot Evaluation

### **Fare Evasion**

The rate of **fare evasion** on nearby bus routes and subway stations.

	Pre-Pilot	Pilot	Change (percentage point)
Nearby Fare-Free Average	47.0%	55.1%	+8.1%
Systemwide	35.5%	42.7%	+7.2%

Systemwide excludes Fare-Free routes, routes nearby Fare-Free routes, routes with less than 40% Automatic Passenger Count coverage, and all Select Bus & Express Bus routes

Pre-Pilot period: September 2022 – May 2023; Pilot period: September 2023 – May 2024

#### **Service Performance – Service Delivered**

**Service Delivered** is the percent of scheduled buses that are actually provided during peak hours. Positive numbers indicate <u>more</u> reliable service.

Route	Pre-Pilot	Pilot	Change (percentage point)
B60	97.4%	95.7%	-1.7%
Bx18A/B	92.6%	93.9%	1.3%
M116	99.6%	98.0%	-1.6%
Q4	97.5%	97.4%	-0.1%
S46/S96	94.3%	90.0%	-4.3%
Fare-Free Avg	96.7%	95.1%	-1.6%
Systemwide	95.4%	95.6%	0.2%

## Service Performance – End-to-End Bus Speed Changes

End-to-end bus speeds measure the average speed of buses on their route.

Route	Pre-Pilot (mph)	Pilot (mph)	% Change between pre-Pilot and Pilot periods
B60	6.0	5.9	-2.2%
Bx18A/B	5.6	5.6	+0.5%
M116	5.3	5.2	-2.6%
Q4	7.8	7.4	-4.8%
S46/S96	10.3	10.0	-2.2%
Fare-Free Avg	7.0	6.8	-2.2%
Systemwide	8.1	7.9	-2.3%

#### **Service Performance – Customer Journey Time Performance**

**Customer Journey Time Performance** is the percent of riders who arrive at their destination within 5 minutes of the schedule.

Positive numbers indicate more reliable service.

Route	Pre-Pilot	Pilot	Change (percentage point)
B60	67.2%	63.3%	-3.9%
Bx18A/B	70.9%	69.6%	-1.3%
M116	85.0%	84.2%	-0.8%
Q4	78.1%	74.6%	-3.5%
S46/S96	69.9%	65.9%	-4.0%
Fare-Free Avg	75.8%	73.6%	-2.2%
Systemwide	72.9%	71.3%	-1.6%

#### Service Performance – Additional Bus Stop & Travel Time

**Additional Bus Stop Time** is the average time riders wait for a bus beyond schedule. Positive numbers indicate <u>less</u> reliable service.

**Additional Travel Time** is the average time riders are on the bus beyond schedule. Positive numbers indicate <u>less</u> reliable service.

Route	Additional Bus Stop Time		Additional Travel Time			
	Pre-Pilot (min)	Pilot (min)	Change (min)	Pre-Pilot	Pilot	Change
B60	2.51	3.06	+0.6	0.38	0.68	+0.3
Bx18A/B	1.95	2.02	+0.1	0.09	0.05	+0
M116	1.05	1.01	0	-0.45	-0.24	+0.2
Q4	1.30	1.29	0	0.47	1.01	+0.5
S46/S96	2.68	3.03	+0.4	0.19	0.53	+0.3
Fare-Free Avg	1.78	1.88	+0.1	0.11	0.4	0.3
Systemwide	1.95	2.10	+0.2	0.403	0.639	0.2

#### Service Performance – Wait Assessment

**Wait Assessment** is the percent of buses that arrive within 5 minutes of schedule at timepoints, measuring how evenly buses are spaced apart.

Positive numbers indicate <u>more</u> reliable service.

Route	Pre-Pilot	Pilot	Change (percentage point)
B60	65%	69%	+4%
Bx18A/B	71%	61%	-10%
M116	79%	78%	-1%
Q4	76%	75%	-1%
S46/S96	62%	56%	-6%
Fare-Free Avg	71%	69%	-2%
Systemwide	70%	68%	-2%

## Cost Evaluation (September 2023 – May 2024)

Route	Farebox Revenue Loss	Revenue Impact to Nearby Services	Extra AAR Costs	One-Time & Upfront Costs	Total by Route
B60	\$2,069,000	\$471,000	\$742,000	\$217,000	\$3,499,000
Bx18	\$539,000	\$110,000	\$113,000	\$217,000	\$979,000
M116	\$2,142,000	\$276,000	\$316,000	\$217,000	\$2,951,000
Q4	\$2,235,000	\$204,000	\$244,000	\$217,000	\$2,900,000
S46/S96	\$1,191,000	\$227,000	\$342,000	\$217,000	\$1,977,000
9-Month Total	\$8,176,000	\$1,288,000	\$1,757,000	\$1,085,000	\$12,306,000

**Farebox revenue loss** represents the expected revenue from riders on the Fare-Free routes.

Revenue impact on nearby services represents ridership on Fare-Free routes that may have been drawn from other routes.

Extra Access-A-Ride costs includes foregone farebox revenue and incremental cost to operate free service above planned service levels.

One-time and upfront costs include marketing, consultant support, and other pilot launch costs.

## Scheduled Service Frequency, Bx18A/B & B60

#### Bronx, Bx18A/B

Day	To Morris Heights, Highbridge (Bx18A)	To Morris Heights, Highbridge (Bx18B)	Avg. Frequency (minutes)				
			AM	Mid	PM	Nite	
Weekday	5:10am – 12:55am	5:00am – 12:40am	10	20	10	-	
Saturday	5:00am – 12:30am	5:15am – 12:15am	30	20	15	-	
Sunday	5:10am – 12:45am	4:55am – 12:30am	30	20	20	-	

#### Brooklyn, B60

Day	To Williams Av	To Williamsburg Bridge Plaza	Avg. Frequency (minutes)				
			AM	Mid	PM	Nite	
Weekday	All times	All times	8	12	10	60	
Saturday	All times	All times	20	15	15	60	
Sunday	All times	All times	20	20	20	60	

## Scheduled Service Frequency, M116

#### Manhattan, M116

Day	To Broadway	To Pleasant Av	Avg. Frequency (minutes)				
			AM	Mid	PM	Nite	
Weekday	5:10am – 1:25am	4:30am – 1:00am	5	10	8	-	
Saturday	7:00am – 1:25am	6:30am – 1:00am	15	12	10	-	
Sunday	5:00am – 1:30am	4:30am – 1:00am	20	12	12	-	

## Scheduled Service Frequency, Q4 Local / Limited

#### Queens, Q4 LCL / LTD

Day	To Parsons Blvd	To 235 St	Avg. Frequency (minutes)			
			AM	Mid	PM	Nite
Q4 Local						
Weekday	All times	All times	9	12	10	60
Saturday	All times	All times	12	10	10	60
Sunday	All times	All times	15	15	12	60
Q4 Limited						
Weekday	5:34am – 8:57am	6:51am – 8:27am	6		7	
	-	2:50am – 8:20pm	6 -	7	-	

## Scheduled Service Frequency, S46 / S96

#### Staten Island, S46 / S96

Day	To Parsons Blvd	To 235 St	Avg. Frequency (minutes)					
			AM	Mid	PM	Nite		
S46 Local								
Weekday	All times	All times	6	12	10	30		
Saturday	All times	All times	15	15	15	30		
Sunday	All times	All times	30	15	15	30		
S96 Limited								
Weekday	4:00pm – 11:00pm	5:20am – 8:13am	12	-	15	-		

## Verbal and Physical Assaults Against Bus Operators

Number of **verbal and physical assaults** against bus operators on fare-free routes.

Route	Pre-Pilot	Pilot	% Change	
B60	11	6	-45.5%	
Bx18A/B	7	2	-71.4%	
M116	6	5	-16.7%	
Q4	5	5	0.0%	
S46/S96	7	4	-42.9%	
Fare-Free Avg	36	22	-38.9%	
Systemwide	1,287	1,032	-19.8%	

Pre-Pilot period: September 2022 - May 2023; Pilot period: September 2023 - May 2024