Supplementary Information for § 1269(d)

2011 – 2015

Metropolitan Transportation Authority

Performance Goals by Agency 2011-2015

Introduction to Performance Goals

This section includes, for each agency, narrative analysis followed by tables presenting specific performance data and performance goals for 2011-2015. These performance indicators are monitored on a regular basis by the MTA Board, and current data on many of these is published on the MTA website, www.mta.info.

MTA New York City Transit

Current View

Subway Mean Distance Between Failures registered a significant increase, improving from 134,795 miles in 2008 to to 153,201 in 2009 and continued to improve to a twelve month average of 168,832 as of September 2010. The MDBF improvements were the result of the delivery of R160 cars, and the more comprehensive scopes of work in the fleet SMS program and better day-to-day maintenance. Bus Mean Distance Between Failures essentially remained static from 2008 through 2009 and has more recently slipped about 2% with the 12-month average as of September at 3,820 miles.

Although safety continues to be one of NYCT's highest priorities, results have declined with the rate of employee lost-time accidents increased from 2.34 in 2008 to 2.86 in 2009, and to 3.16 as of September 2010. The rate of subway and bus customer injuries has increased slightly. In order to address these declines, NYCT continues to reassess existing safety rules and procedures to ensure clarity and consistent implementation throughout the Departments of Subways and Buses.

The On-Time Performance (OTP) indicator was modified to consolidate both Absolute and Controllable OTP into a single measure.

Terminal OTP combines the best of former "Absolute" and "Controllable"; reflects schedule and service plan in effect; all delays, including those charged to police and customers; no penalty for planned platform closure; and focus on weekdays.

The definition is now: Subways Weekday Terminal OTP evaluates performance based on schedule / service plan in effect, includes all delays, effective June, 2010. The 2010 projection and all subsequent years reflect the new standard.

Wait Assessment remains the primary measure of service reliability from our customers' perspective. The standard has been modified for Subway Wait Assessment effective July, 2010. The new standard is as follows:

- Wait Assessment measures the actual time interval between trains against the scheduled interval, weekdays between 6:00 am and midnight at enroute timepoints. It is defined as the percentage of actual intervals that are no more than the scheduled interval + 25%. For the 1 thru 6 Lines, 100% automated signal data will be used, while the data collected for the 7 Train and the B Division is based on a sample methodology.

The Subway 2010 projection and all subsequent years reflect the new standard. The Bus Wait Assessment indicator remains unchanged.

Subway Wait Assessment, based on the original standard, increased from 86.6% in 2008 to 89.0% in 2009. Applying the new standard, the recalculated results change to 75.3% in 2008 and 78.1% in 2009; the rate continues to increase and is 78.4% as of September 2010. The unchanged Bus Wait Assessment standard increased slightly between 2008 (82.9%) and 2009 (83.3%)

MTA New York City Transit
2011-2015 Performance Goals

Goal: Improve Safety for Employees and Customers

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Lost Time/ Restricted Duty Cases Per 200,000 Work Hours[1]	2.25	2.86	2.72	3.16	2.64	2.56	2.48	2.41	2.33
Subway Customer Injuries per Million Customers	3.07	3.30	3.20	2.91	3.10	3.01	2.92	2.83	2.75
Bus Collision Injury Rate*	5.76	6.09	5.91	10.40	5.88	5.85	5.82	5.79	5.76
Bus Customer Accident Injury Rate**	1.01	1.09	1.06	1.29	1.04	1.03	1.01	1.00	.98

[1] NYCT measures lost-time/restricted duty cases on an equivalent per-100-employees basis.
* per Million Miles Traveled. An injury resulting from a collision between a bus and another vehicle, an object, a person, or an animal.
** per Million Customers. An injury resulting from an incident on the bus system that occurred while the person was boarding the bus, on board the bus, or alighting from the bus (excludes assaults).

Goal: Improve Customer Satisfaction

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Subway									
Wait Assessment (%)	n.a.	78.1	78.1	78.4	78.1	79.1	80.0	81.0	82.0
Mean Distance Between Failures (MDBF)	145,000	153,201	155,000	168,832	158,000	158,500	159,000	159,500	160,000
Bus									
Wait Assessment (%)	82.7	83.3	84.1	82.6	84.9	85.8	86.6	87.5	88.4
Mean Distance Between Failures (MDBF)	3,957	3,921	3,964	3,820	3,900	3,939	4,047	4,193	4,097

MTA Long Island Rail Road
Current View

LIRR results demonstrate its unwavering commitment to safety. Injuries per Million Customers were 6% less in 2009 (5.93) than in 2008 (6.27), and continue to fall in 2010, with results as of September 2010 at 5.54.

Employee Lost Time/Restricted Duty Cases per 200,000 work hours has increased, from 2.05 in 2008 to 2.30 in 2009, and 2.80 as of September 2010. Some of the increase is believed to be a result of more accidents being reported. Still, the total number of reported customer and employee injuries has dropped by 50% over the last decade. The LIRR Customer Safety Review Committee has continued using the Accident Report Non-Employee Form (ARNE), which has assisted in capturing accident data for analysis. This committee meets monthly to review data, identify trends and initiate corrective actions. Customer safety is and will remain a top priority for the LIRR. The efforts of our Customer Safety Review Committee enable the LIRR to quickly identify mitigation methods to reduce and eliminate accidents system-wide. These efforts to increase the safety of our employees and customers have not gone unnoticed.

The LIRR indicators of Customer Satisfaction are positive; On-Time Performance (OTP) was 95.2% in 2009, exceeding the 2008 rate of 95.1%. The achievement of 95.2% was the best OTP since the current OTP standard was adopted in 1979. Unfortunately 2010 is proving to be a less successful year due to weather-related incidents causing various conditions including downed trees and power problems, signal trouble, and a train derailment. As of September 2010, the OTP is 92.4%. Mean Distance Between Failure (MDBF) is increasing steadily, going from 132,205 in 2008, to 145,703 in 2009 and 150,681 through September of 2010. The continued improvement in MDBF correlates with the introduction of the more reliable fleet of M7 trains, which replaced the 35-year-old M1 fleet. The M7 fleet, along with our modernization efforts including the completion of the Valley Interlocking switch and signal replacement project, has and will continue to favorably impact On-Time Performance.

MTA Long Island Rail Road

2011-2015 Performance Goals

Goal: Improve Safety for Employees and Customers

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Lost Time/ Restricted Duty Cases Per 200,000 Work Hours	1.95	2.30	2.25	2.80	2.05	1.84	1.66	1.49	1.34
Injuries per Million Customers	5.43	5.93	5.22	5.54	5.10	4.59	4.13	3.71	3.34

Goal: Improve Customer Satisfaction

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
On-Time Performance (OTP)[1]	95%	95.2%	95.1%	92.4%	95%	95%	95%	95%	95%
Mean Distance Between Failures (MDBF)	105,000	145,703	110,000	150,681	150,000	150,000	152,000	153,000	155,000

[1] Operations may be adversely affected by the many construction projects included in the next capital program. Consequently, the projected OTP may be impacted and require revising the goals of 2011 thru 2015. The LIRR intends to use all available measures to maintain our on-time performance while we carry out improvements to the system.

Metro-North Railroad
Current View

Continuing improvement in performance indicators for employee safety, injuries per million customers, mechanical reliability as measured by Mean Distance Between Failures (MDBF) and On-Time Performance (OTP) demonstrate Metro-North's strong performance.

Metro-North's 2010 On-Time Performance for year-to-date as of September was 97.9%, slightly higher than the 2009 performance of 97.8% for the year and higher also than the 2008 performance of 97.5%. 2009 was the thirteenth consecutive year that the railroad operated above the 96% mark. Metro-North's OTP goal for 2011 is 97.7% to account for construction projects scheduled in that time period which will impact railroad operations.

The quality of Metro-North's service is directly tied to the quality of car fleet performance. MDBF continues to climb, reaching 140,083 for the year-to-date as of September 2010. This is an 18% increase over the 2009 MDBF of 118,534 miles. The 2009 result represents a 74.3% improvement over 2005 (67,996 miles). Key factors that enabled the significant improvement in this area included investments in new M-7 cars and the Critical System Replacement program for M-2 cars. Further improvement is expected to be achieved as the new M-8s go into service on the New Haven Line. An MDBF of 145,000 results in an equipment reliability of 99.8%. Metro-North will be looking to develop a new metric as the MDBF Goal has been rendered obsolete by the improved reliability of the new fleets.

Safety performance continues to be Metro-North's priority focus. Employee safety as measured by the rate of lost time or restricted duty injuries improved from 3.1 injuries per 200,000 work hours in 2008 to 2.1 in 2009. The injury rate through the first nine months had slipped to 2.7 through September 2010.

MTA Metro-North Railroad

2011-2015 Performance Goals

Goal: Improve Safety for Employees and Customers

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Lost Time/ Restricted Duty Cases Per 200,000 Work Hours	1.9	2.1	1.8	1.9	1.7	1.6	1.5	1.5	1.5
Injuries per Million Customers	3.2	3.0	3.0	2.7	2.9	2.8	2.8	2.8	2.8

Goal: Improve Customer Satisfaction

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
On-Time Performance (OTP)	97.6%	97.8%	97.7%	97.9%	97.7%	96.5%	96.5%	96.5%	96.5%
Mean Distance Between Failures (MDBF)	105,000	118,534	115,000	140,083	120,000	140,000	145,000	145,000	145,000

MTA Long Island Bus
Current View

Streamlining of management and support functions has continued with objectives that include overhauling how the MTA does business, reducing the cost of providing services, improving service change information, making new fare collection technology work for customers, telling customers when to expect the next bus, and faster bus service.

The rate of employee lost time accidents per 100 employees was standardized in Long Island Bus to be consistent with the reporting at MTA Bus and NYCT Bus. This indicator has increased from 3.2 in 2008, to 3.5in 2009, and 3.65 for year-to-date as of September 2010. Beginning in 2009, LI Bus began tracking Customer Accident Injuries per Million Customers and set a goal of 1.25 per million customers. The 2009 year end result was 1.10, better than the goal by 12%, but the 2010 year-to-date rate as of September was 2.08.

The tracking of Bus Collision Injuries per Million Vehicle Miles also began in 2009 when the rate achieved was 2.35. In 2009, LIB reported only injuries that resulted in an individual being removed from the scene of the accident, or subsequently filing an injury claim against LIB. In an effort to standardize the reporting across the three agencies, LI Bus now reports all injuries claimed, regardless of whether or not the injured party is treated at the scene and released or refuses medical attention and leaves the scene unassisted. Therefore, the 2010 result for the first nine months of the year is higher than the 2009 result. As of September the rate was 4.93.

As part of the new consolidated bus organizational structure mentioned above, LI Bus operators and maintainers receive the same training and safety programs that are delivered to NYC Transit employees. Specifically, all bus operators receive annual training including safe driving, mirror adjustment, and familiarization with new equipment and procedures. LI Bus participates in safety blitz and depot walkthrough programs that help reduce Lost-Time Employee Accidents, Collisions and Customer Injuries.

The 12-month average Mean Distance Between Failure (MDBF) as of September 2010 was 3,757 miles, an improvement above the 2009 calendar actual of result of 2,605 miles and also higher than the 2008 MDBF of 2,605 miles. Various operational performance enhancements are being implemented and/or explored as we benefit from “best practices” gained from the consolidation exercise.

MTA Long Island Bus

2011 - 2015 Performance Goals

Goal: Improve Safety for Employees and Customers

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Lost Time/Restricted Duty Cases Per 200,000 Work Hours[1]	2.9	3.54	3.43	3.65	3.41	3.40	3.38	3.36	3.35
Bus Collision Injuries per Million Miles [2]	5.54	2.35	2.28	4.93	5.32	5.21	5.11	5.01	5.01
Bus Customer Accident Injury per Million Customers [2]	1.25	1.10	1.07	2.08	1.20	1.18	1.15	1.13	1.13

Goal: Improve Customer Satisfaction

Indicator	Goal 2009	Actual 2010	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Mean Distance Between Failures (MDBF)	2,103	2,605	3,151	3,757	3,328	3,262	3,196	3,132	3,070

[1] LI Bus does not place employees on restricted duty. LI Bus measures lost time/restricted duty cases on an equivalent per-100-employees basis.

[2] This was a new indicator for 2009. In 2010, LIB changed reporting procedures to include all injuries claimed not only those that resulted in an individual being removed from the scene or filing a subsequent claim.

MTA Bus
Current View

Streamlining of management and support functions continued in 2009, with objectives that include overhauling how the MTA does business, reducing the cost of providing services, improving service change information, making new fare collection technology work for customers, telling customers when to expect the next bus, and faster bus service.

In 2009, the rate of employee lost-time accidents was 10.52. In 2010, MTA Bus began a program implementing restrictive duty work rules for employees with minor injuries. This is similar to practices in place at NYCT Bus and is expected to lower the rate that spiked in 2009 as a result of minor injuries. The result was 9.53 as of September 2010. The rate of Collision Injuries per Million Vehicle Miles, improved by 20.1% in 2009. The year end result was 4.38 per million miles down from 5.49 in 2008. The September 2010 result was reported as 6.42. Customer Accident Injuries per Million Customers also improved by 6.2%. The year end result was 1.33 per million customers down from 1.41 in 2008. In 2010, the result as of September was down to 1.27.

As part of the new Regional Bus organizational structure mentioned above, MTA Bus operators and maintainers receive the same training and safety programs that are delivered to NYC Transit employees. Specifically, all bus operators receive annual training including safe driving, mirror adjustment, and familiarization with new equipment and procedures. MTA Bus participates in safety blitz and depot walkthrough programs that help reduce Lost-Time Employee Accidents, Collisions and Customer Injuries.

Mean Distance Between Failures (MDBF) for year end 2009 was 3,372 miles.
This represents a 27.2 % decrease from the 2008 actual of 4,631 miles. As mentioned last year performance is tied to the age factor and limited procurement of new buses. Between 2005 and 2007 MTA Bus received an infusion of new vehicles into the overall fleet which resulted in approximately 20% of the fleet age being less than 3 years old. In 2009, those new buses which are now 3 to 5 years older experienced a typical drop in performance from the higher MDBF that is customarily experienced from newly purchased buses. As of December 2009, there were only 103 buses that were 2 years old or newer, a decrease of approximately 60% from 2008. As a result, the number of buses in the overall fleet less than 3 years old has decreased approximately 8% from last year. The 12 month MDBF through September 2010 is 3,436; Year-end 2010 performance is expected to be consistent with 2009 performance levels.

MTA Bus Company
2011 - 2015 Performance Goals

Goal: Improve Safety for Employees and Customers

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Lost Time/Restricted Duty Cases Per 200,000 Work Hours	6.0	10.52	10.20	9.53	5.60	5.50	5.30	5.20	5.20
Bus Collision Injuries per Million Miles	5.38	4.38	4.25	6.42	4.25	4.25	4.25	4.25	4.25
Bus Customer Accident Injury per Million Customers	1.38	1.33	1.29	1.27	1.27	1.26	1.26	1.25	1.25

Goal: Improve Customer Satisfaction

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Mean Distance Between Failures (MDBF)	4,300	3,372	3,616	3,436	3,252	3,205	4,119	4,065	3,828

MTA Bridges and Tunnels
Current View

The Staffed Lane Changeover Time remains high, changing from 98.7% in 2008 to 98.5% in 2009, but for the first nine months of 2010 fell below the goal of 98.0% to 97.7%. The E-ZPass market share at B&T facilities moved up slightly, from 74% in 2008 and 2009 to 76.3% during the first nine months of 2010. The rate of growth is slow now that B&T's E-ZPass system is in its thirteenth year of operation and because of economic conditions, but the overall market share is among the highest of the 22 agencies in the E-ZPass Interagency Group. B&T continues to encourage its customers to use E-ZPass to pay tolls and expects E-ZPass market share to grow by nearly 1% a year.

Safety for both employees and customers remains one of B&T's highest priorities. In 2009, B&T ended the year with a rate of 2.6, down from the previous year's rate of 2.9. But the year-to-date rate for 2010 was 5.6 through September 2010. However, employee injuries have decreased by more than 82% since the All-Agency Safety Initiative began in 1996.

In terms of customer safety, the Collision Rate with Injury per Million Vehicles was slightly higher in 2009 (0.96) than in 2008 (0.95) for 2009 but improved to only 0.91 for the first nine months of 2010. Since 1996, the Authority has been able to reduce collisions with injury by more than one third, through inter-departmental actions and enforcement efforts to maintain high safety standards in both construction projects and daily operations.

MTA Bridges & Tunnels
2011-2015 Performance Goals

Goal: Improve Safety for Employees and Customers

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
Lost Time/ Restricted Duty Cases Per 200,000 Work Hours	2.8	2.6	2.7	5.6	2.6	2.5	2.4	2.3	2.2
Collisions w/Injury Per Million Vehicles	.90	.96	.91	.91	.90	.90	.90	.90	.90

Goal: Improve Customer Satisfaction

Indicator	Goal 2009	Actual 2009	Goal 2010	YTD Sep 2010	2011	2012	2013	2014	2015
E-ZPass Market Share of Total B&T Traffic	75%	74%	75%	76.3%	76%	77%	78%	79%	80%
Staffed Lane Changeover Time (% Less than 2.0 Minutes)	98.0%	98.5%	98.0%	97.7%	98.0%	98.0%	98.0%	98.0%	98.0%

Operating Resources and Costs by Agency
2011-2015

Introduction to Operating Resources and Costs

The following table presents projected operating resources and costs by agency for 2011-2015. Details are presented in the attached Financial Plan.

METROPOLITAN TRANSPORTATION AUTHORITY
Non-Reimbursable
November Financial Plan 2011-2015
($ in millions)

Non-Reimbursable		2009 Actual	2010 Mid-Year Forecast	2011 Preliminary Budget	2012	2013	2014	2015
Fare and Toll Revenue								
New York City Transit		$3,133	$3,303	$3,358	$3,433	$3,482	$3,528	$3,572
Bridges and Tunnels		1,332	1,417	1,423	1,433	1,434	1,439	1,443
Metro-North Railroad		502	527	537	554	566	577	587
Long Island Rail Road		509	526	535	543	549	554	559
MTA Bus Company		160	168	169	172	174	176	180
Long Island Bus		42	43	43	44	44	45	45
Staten Island Railway		4	5	5	5	5	5	6
	Subtotal	*$5,683*	*$5,989*	*$6,071*	*$6,184*	*$6,255*	*$6,324*	*$6,391*
Other Operating Revenue								
New York City Transit		$252	$277	$295	$320	$347	$377	$414
Bridges and Tunnels		13	14	13	13	13	13	13
Metro-North Railroad		40	43	43	44	45	47	48
Long Island Rail Road		37	32	38	36	37	38	39
MTA Headquarters		54	57	58	59	60	61	62
MTA Bus Company		21	18	19	19	19	20	20
Long Island Bus		3	2	2	2	2	2	2
Staten Island Railway		2	2	2	2	2	2	2
First Mutual Transportation Assurance Company		38	54	54	55	56	57	58
	Subtotal	*$461*	*$499*	*$523*	*$549*	*$581*	*$617*	*$659*
Total Operating Revenue		**$6,144**	**$6,488**	**$6,594**	**$6,733**	**$6,836**	**$6,941**	**$7,050**
Operating Expense								
New York City Transit		$8,157	$8,312	$8,628	$9,052	$9,510	$10,031	$10,543
Bridges and Tunnels		560	541	540	561	589	618	664
Metro-North Railroad		1,188	1,233	1,318	1,371	1,443	1,496	1,536
Long Island Rail Road		1,528	1,541	1,592	1,645	1,694	1,746	1,889
MTA Headquarters		432	450	477	492	507	529	551
Bus Company		544	613	626	639	659	675	696
Long Island Bus		131	143	143	151	153	158	165
Staten Island Railway		56	53	48	51	52	53	54
First Mutual Transportation Assurance Company		14	(10)	(13)	(19)	(29)	(40)	(58)
Other		(15)	(28)	75	74	74	72	65
Total Operating Expense		**$12,594**	**$12,848**	**$13,434**	**$14,017**	**$14,653**	**$15,338**	**$16,105**
Dedicated Taxes and State/Local Subsidies		**$4,137**	**$4,908**	**$5,239**	**$5,533**	**$5,787**	**$6,030**	**$6,192**
Debt Service (excludes Service Contract Bonds)		**($1,404)**	**($1,756)**	**($2,043)**	**($2,215)**	**($2,392)**	**($2,583)**	**($2,722)**

NOTE:

Capital Resources and Costs 2010-2014

Capital Program Information

The 2010-2014 Capital Program was approved by CPRB on June 1, 2010. Please see attached 2010-2014 Capital Program executive summary and plan book document for details.

Commitments:
The MTA has estimated its capital needs for the core program for 2010-2014 in the table below. Commitments come directly from the CPRB-approved 2010-2014 Capital Program.

2010-2014 Core Capital Program Estimates (millions)

MTA Core Program	2010	2011	2012	2013	2014
New York City Transit	3,525.4	1,507.6	5,288.1	1,652.9	867.1
Long Island Rail Road	300.2	700.8	928.0	492.6	132.4
Metro-North Railroad	392.9	274.5	687.1	207.9	140.7
MTA Bus	50.9	78.4	134.6	35.5	25.6
Bridges and Tunnels	384.4	570.0	557.3	760.8	180.4
MTA Wide Security Program	50.0	50.0	135.0	50.0	50.0
MTA Interagency	222.0	8.2	58.4	13.2	13.2
Total MTA Core Program	**4,925.8**	**3,189.5**	**7,788.5**	**3,212.9**	**1,409.4**

The approved 2010-2014 capital plan provides $4,441 million for East Side Access (ESA) and Second Avenue Subway (SAS). (Previous capital programs provided $7,338 million for ESA and SAS.) This funding is a portion of the overall costs for each and is expected to fund these projects to completion; ESA is estimated at $7,328 million and SAS is estimated at $4,451 million.

Resources:
Included in table 2 of the attached 2010-2014 Capital Program plan book document is a list of funding resources for first two years of the five-year program only (2010 and 2011). The specific funding for 2012 through 2014 will be identified before advancing work to address the capital needs identified for these years.

Service Configuration, Frequency, and Others by Agency

MTA New York City Transit

List of Tables

Table	Description
	Maps and Schedules
1	Bus Loading Guidelines
2	Subway Loading Guidelines
3	Subway and Bus Policy Headways
4	Subway and Bus Performance Targets
5	Subway Facilities and Equipment
6	Subway Passenger Car Fleet Roster
7	Subway Locomotive and Work Train Fleet
8	Subway Shops and Yards
9	Bus Facilities and Equipment
10	Bus Depots by Division
11	Base Shop Characteristics
12	Staten Island Railway Performance Targets
13	Staten Island Railway Facilities and Equipment

NYC Transit and Staten Island Railway Maps and Schedules

For maps and schedules of NYC Transit subway and bus services, and for maps and schedules of Staten Island Railway services, please visit the MTA web site:

http://www.mta.info

Table 1

Local Bus Loading Guidelines

Standard 40' Bus

Weekday Peak Period Service Load Guidelines

Grid Routes			Feeder Routes		
7:00A.M. to 9:00A.M. and 4:00P.M. to 7:00P.M.			6:30A.M. to 8:30A.M. and 4:30P.M. to 7:30P.M.		
Maximum Riders/1/2 hr	Headway (Minutes)	Maximum Avg.Load Per Trip	Maximum Riders/1/2 hr	Headway (Minutes)	Maximum Avg.Load Per Trip
36	30.0	36	36	30.0	36
54	20.0	36	63	20.0	42
90	15.0	45	94	15.0	47
120	12.0	48	130	12.0	52
156	10.0	52	171	10.0	54
220	7.5	54	252	7.5	54
290	6.0	54	325	6.0	54
360	5.0	54	390	5.0	54
915	2.0	54	990	2.0	54

Off - Peak Period Service Load Guidelines

Grid Routes			Feeder Routes		
10A.M. to 2P.M. and 7P.M. to 9P.M. Weekdays			9:30A.M. to 2P.M. and 8:30P.M. to 9P.M. Weekdays		
6A.M. to 9P.M. Saturday and Sunday			6A.M. to 9P.M. Saturday and Sunday		
Maximum Riders/hour	Headway (Minutes)	Maximum Avg.Load Per Trip	Maximum Riders/hour	Headway (Minutes)	Maximum Avg.Load Per Trip
72	30.0	36	72	30.0	36
108	20.0	36	108	20.0	36
144	15.0	36	144	15.0	36
180	12.0	36	190	12.0	38
216	10.0	36	252	10.0	42
296	7.5	37	376	7.5	47
400	6.0	40	500	6.0	50
516	5.0	43	600	5.0	50
690	4.0	46	750	4.0	50
823	3.5	48	874	3.5	51

Late Evening Service Load Guidelines

Grid Routes			Feeder Routes		
9:00 P.M. to 1:00 A.M.			9:00 P.M. to 1:00 A.M.		
Weekdays, Saturday and Sunday			Weekdays, Saturday and Sunday		
Maximum Riders/hour	Headway (Minutes)	Maximum Avg.Load Per Trip	Maximum Riders/hour	Headway (Minutes)	Maximum Avg.Load Per Trip
72	30.0	36	72	30.0	36
108	20.0	36	108	20.0	36
144	15.0	36	144	15.0	36
180	12.0	36	180	12.0	36
216	10.0	36	216	10.0	36
288	7.5	36	288	7.5	36
617	3.5	36	617	3.5	36

Note 1 - Transition periods between peak and off peak guidelines use average of both standards

Articulated Bus

Weekday Peak Period Service Load Guidelines

Grid Routes			Feeder Routes		
7:00A.M. to 9:00A.M. and 4:00P.M. to 7:00P.M.			6:30A.M. to 8:30A.M. and 4:30P.M. to 7:30P.M.		
Maximum Riders/1/2 hr	Headway (Minutes)	Maximum Avg.Load Per Trip	Maximum Riders/1/2 hr	Headway (Minutes)	Maximum Avg.Load Per Trip
n/a	30.0	n/a	n/a	30.0	n/a
n/a	20.0	n/a	n/a	20.0	n/a
n/a	15.0	n/a	n/a	15.0	n/a
175	12.0	70	190	12.0	76
225	10.0	75	249	10.0	83
328	7.5	82	360	7.5	90
420	6.0	84	450	6.0	90
504	5.0	84	540	5.0	90
593	4.3	85	649	4.3	93

Off - Peak Period Service Load Guidelines

Grid Routes			Feeder Routes		
10A.M. to 2P.M. and 7P.M. to 9P.M. Weekdays			9:30A.M. to 2P.M. and 8:30P.M. to 9P.M. Weekdays		
6A.M. to 9P.M. Saturday and Sunday			6A.M. to 9P.M. Saturday and Sunday		
Maximum Riders/hour	Headway (Minutes)	Maximum Avg.Load Per Trip	Minimum/ Maximum Riders/hour	Headway (Minutes)	Maximum Avg.Load Per Trip
n/a	30.0	n/a	n/a	30.0	n/a
n/a	20.0	n/a	n/a	20.0	n/a
n/a	15.0	n/a	n/a	15.0	n/a
280	12.0	56	285	12.0	57
336	10.0	56	342	10.0	57
448	7.5	56	496	7.5	60
560	6.0	56	650	6.0	65
684	5.0	57	780	5.0	65
915	4.0	61	975	4.0	65
1200	3.2	64	1238	3.2	66

Late Evening Service Load Guidelines

Grid Routes			Feeder Routes		
9:00 P.M. to 1:00 A.M.			9:00 P.M. to 1:00 A.M.		
Weekdays, Saturday and Sunday			Weekdays, Saturday and Sunday		
Maximum Riders/hour	Headway (Minutes)	Avg.Load Per Trip	Maximum Riders/hour	Headway (Minutes)	Maximum Avg.Load Per Trip
n/a	30.0	n/a	n/a	30.0	n/a
n/a	20.0	n/a	n/a	20.0	n/a
n/a	15.0	n/a	n/a	15.0	n/a
280	12.0	56	280	12.0	56
336	10.0	56	336	10.0	56
448	7.5	56	448	7.5	56
1050	3.2	56	1050	3.2	56

Note 1 - Standard bus guidelines used for loadings requiring headways of 15 minutes or longer
Note 2 - Transition periods between peak and off peak guidelines use average of both standards

Table 1

Express Bus Loading Guidelines

	Trips per 30 minutes	Headway (Min.)	Standard Capacity Express Bus: Average Maximum Load	High Capacity Express Bus: Average Maximum Load
Peak	1	30	40	55
	2	15	40	55
	3	10	40	55
	4	7.5	40	55
	5	6	40	55
	6	5	40	55
	7.5 or more	4 or less	40	55
Off-Peak	0.5	60	20	20
	1	30	30	35
	1.5	20	40	45
	2	15	40	50
	3 or more	10 or less	40	50

Source: Division of Operations Planning, Department of the Executive Vice President

Table 2

Subway Loading Guidelines

"A" Division Car

Weekday Peak (7:00 - 9:30 a.m., 4:00 - 6:30 p.m.)

Headway	Load/Car	# of Standees	Cars/Train	Trips per Half-Hour	Sq. Ft. per Standee	% Seated	Riders per Half-Hour
2.0	110	70	10	15.0	3.0	36%	16,500
2.5	110	70	10	12.0	3.0	36%	13,200
3.0	110	70	10	10.0	3.0	36%	11,000
4.0	110	70	10	7.5	3.0	36%	8,250
5.0	105	65	10	6.0	3.2	38%	6,300
6.0	100	60	10	5.0	3.5	40%	5,000
7.5	95	55	10	4.0	3.8	42%	3,800
10.0	90	50	10	3.0	4.2	44%	2,700

Midday (10:30 a.m. - 3:00 p.m.), Evening (8:00 p.m. - 12:00 Midnight), Saturday, and Sunday

Headway	Load/Car	# of Standees	Cars/Train	Trips per Hour	Sq. Ft. per Standee	% Seated	Riders per Hour
4.0	50	10	10	15.0	21.0	80%	7,500
5.0	50	10	10	12.0	21.0	80%	6,000
6.0	50	10	10	10.0	21.0	80%	5,000
7.5	50	10	10	8.0	21.0	80%	4,000
8.5	50	10	10	7.0	21.0	80%	3,500
10.0	50	10	10	6.0	21.0	80%	3,000
12.0	50	10	10	5.0	21.0	80%	2,500

Owl (1:00 - 5:00 a.m.)

Headway	Load/Car	# of Standees	Cars/Train	Trips per Hour	Sq. Ft. per Standee	% Seated	Riders per Hour
20.0	50	10	10	3.0	21.0	80%	1,500

Notes:

1. During the transition between these time periods, passenger loads between those shown above are permitted.
2. The 7 has 11 cars per train. 42nd Street Shuttle operates with 3- and 4-car trains.
3. Division "A" cars seat 38 to 43 passengers (seats vary by car type).

Source: Division of Operations Planning, Department of the Executive Vice President

Table 2

Subway Loading Guidelines

"B" Division 60-Foot Car

Weekday Peak (7:00 - 9:30 a.m., 4:00 - 6:30 p.m.)

Headway	Load/Car	# of Standees	Cars/Train	Trips per Half-Hour	Sq. Ft. per Standee	% Seated	Riders per Half-Hour
2.0	145	103	10	15.0	3.0	29%	21,750
2.5	145	103	10	12.0	3.0	29%	17,400
3.0	145	103	10	10.0	3.0	29%	14,500
4.0	145	103	10	7.5	3.0	29%	10,875
5.0	135	93	10	6.0	3.4	31%	8,100
6.0	125	83	10	5.0	3.8	34%	6,250
7.5	115	73	10	4.0	4.4	37%	4,600
10.0	115	73	10	3.0	4.4	37%	3,450

Midday (10:30 a.m. - 3:00 p.m.), Evening (8:00 p.m. - 12:00 Midnight), Saturday, and Sunday

Headway	Load/Car	# of Standees	Cars/Train	Trips per Hour	Sq. Ft. per Standee	% Seated	Riders per Hour
4.0	53	11	10	15.0	29.4	80%	7,875
5.0	53	11	10	12.0	29.4	80%	6,300
6.0	53	11	10	10.0	29.4	80%	5,250
7.5	53	11	10	8.0	29.4	80%	4,200
8.5	53	11	10	7.0	29.4	80%	3,675
10.0	53	11	10	6.0	29.4	80%	3,150
12.0	53	11	10	5.0	29.4	80%	2,625

Owl (1:00 - 5:00 a.m.)

Headway	Load/Car	# of Standees	Cars/Train	Trips per Hour	Sq. Ft. per Standee	% Seated	Riders per Hour
20.0	53	11	10	3.0	29.4	80%	1,575

Notes:

1. During the transition between these time periods, passenger loads between those shown above are permitted.
2. CJLM and Z trains operate with 8 cars per train.
3. R143 and R160 60-foot cars seat 42 to 43 passengers (seats vary by car type). R32 and R42 cars seat 50 passengers, but are not included here because they are slated for retirement.

Source: Division of Operations Planning, Department of the Executive Vice President

Table 2

Subway Loading Guidelines

"B" Division 75-Foot Car

Weekday Peak (7:00 - 9:30 a.m., 4:00 - 6:30 p.m.)

Headway	Load/Car	# of Standees	Cars/Train	Trips per Half-Hour	Sq. Ft. per Standee	% Seated	Riders per Half-Hour
2.0	175	103	8	15.0	3.0	41%	21,000
2.5	175	103	8	12.0	3.0	41%	16,800
3.0	175	103	8	10.0	3.0	41%	14,000
4.0	175	103	8	7.5	3.0	41%	10,500
5.0	165	93	8	6.0	3.3	44%	7,920
6.0	155	83	8	5.0	3.7	46%	6,200
7.5	145	73	8	4.0	4.2	50%	4,640
10.0	140	68	8	3.0	4.5	51%	3,360

Midday (10:30 a.m. - 3:00 p.m.), Evening (8:00 p.m. - 12:00 Midnight), Saturday, and Sunday

Headway	Load/Car	# of Standees	Cars/Train	Trips per Hour	Sq. Ft. per Standee	% Seated	Riders per Hour
4.0	90	18	8	15.0	17.2	80%	10,800
5.0	90	18	8	12.0	17.2	80%	8,640
6.0	90	18	8	10.0	17.2	80%	7,200
7.5	90	18	8	8.0	17.2	80%	5,760
8.5	90	18	8	7.0	17.2	80%	5,040
10.0	90	18	8	6.0	17.2	80%	4,320
12.0	90	18	8	5.0	17.2	80%	3,600

Owl (1:00 - 5:00 a.m.)

Headway	Load/Car	# of Standees	Cars/Train	Trips per Hour	Sq. Ft. per Standee	% Seated	Riders per Hour
20.0	90	18	8	3.0	17.2	80%	2,160

Notes:

1. During the transition between these time periods, passenger loads between those shown above are permitted.
2. S Rockaway Park Shuttle and G routes operate with 4 car trains. S Franklin Av Shuttle operates with 2 car trains.
3. Division "B" 75-foot cars seat approximately 70 to 74 passenger (seats vary by car type).

Source: Division of Operations Planning, Department of the Executive Vice President

Table 3

Bus and Subway Policy Headways

Minimum Service Frequencies

Local Bus

- *All Times except Late Nights*: If service is provided, it should operate at least every 30 minutes.
- *Late Nights (1 a.m. – 5 a.m.)*: If service is provided, it should operate at least every 60 minutes.

Express Bus

- *Weekday Rush Hours and Weekday Middays*: If service is provided, it should operate at least every 30 minutes.
- *Weekday Evenings and Weekends*: If service is provided, it should operate at least every 60 minutes.

Subway

- *Weekday Rush Hours, Weekday Middays, and Saturday Middays*: If service is provided, it should operate at least every 10 minutes.
- *Weekday Evenings, Saturday Evenings, and All Day on Sunday*: If service is provided, it should operate at least every 12 minutes.
- *Late Nights (1 a.m. – 5 a.m.)*: If service is provided, it should operate at least every 20 minutes.

Table 4

Subway and Bus Performance Targets

	Goal 2009	Act. 2009	Proj. 2010	Proj. 2011	Proj. 2012	Proj. 2013	Proj. 2014	Proj. 2015
Safety:								
Subway Customer Injuries per Million Customers	3.07	3.30	3.20	3.10	3.01	2.92	2.83	2.75
Bus Collision Injuries per Million Miles	5.76	6.09	5.91	5.88	5.85	5.82	5.79	5.76
Bus Customer Accident Injuries per Million Customers	1.01	1.09	1.06	1.04	1.03	1.01	1.00	0.98
Lost-Time/Restricted Duty Cases per 100 Employees	2.25	2.86	2.72	2.64	2.56	2.48	2.41	2.33
Customer Satisfaction:								
Subway Wait Assessment [1]	N/A	78.1%[1]	78.1%[1]	78.1%[1]	79.1%[1]	80.0%[1]	81.0%[1]	82.0%[1]
Subway Absolute On-Time Performance	75.8%	75.8%	N/A	N/A	N/A	N/A	N/A	N/A
Subway Controllable On-Time Performance	91.4%	89.2%	N/A	N/A	N/A	N/A	N/A	N/A
Subway Weekday Terminal On-Time Performance [2]	N/A	88.7%[2]	92.0%[2]	91.8%[2]	91.9%[2]	92.0%[2]	92.1%[2]	92.2%[2]
Subway Mean Distance Between Failures	145,000	153,201	155,000	158,000	158,500	159,000	159,500	160,000
Bus Wait Assessment	82.7%	83.3%	84.1%	84.9%	85.8%	86.6%	87.5%	88.4%
Bus Mean Distance Between Failures	3,957	3,921	3,964	3,900	3,939	4,047	4,193	4,097
Cleaning:								
Litter Condition in Cars - % Passing [3] (Presence of Litter) - Measured at Terminal	97.0%	98.0%	98.0%	98.2%	98.4%	98.6%	98.8%	99.0%
Cleanliness of Car Floors and Seats - % Passing [3] (Degree of Dirtiness) - Measured at Terminal	97.0%	98.0%	98.0%	98.2%	98.4%	98.6%	98.8%	99.0%
Litter Condition in Stations - % Passing [3] (Presence of Litter) - Measured Before Morning Peak	74.0%	81.0%	81.0%	83.0%	85.0%	87.0%	89.0%	91.0%
Floor and Seat Cleanliness Conditions in Stations - % Passing [3] (Degree of Dirtiness) - Measured Before Morning Peak	84.0%	92.0%	92.0%	92.5%	93.0%	93.5%	94.0%	94.5%
Litter Condition in Buses - % Passing [3] (Presence of Litter) - Measured Before Entering Service	98.0%	97.0%	97.0%	98.0%	98.0%	98.0%	98.0%	98.0%
Cleanliness of Bus Interiors - % Passing [3] (Degree of Dirtiness) - Measured Before Entering Service	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%
Air Conditioning:								
Climate Condition in Cars % of cars with with average interior temperature between 58F and 78F.	98.0%	99.0%	99.0%	99.0%	99.0%	99.0%	99.0%	99.0%
Climate Control Condition in Buses % of buses with with average interior temperature between 50F and 78F, except if ambient temperature is above 98F, then the climate control must maintain a 20F gradient.	94.0%	94.5%	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%

[1] Subway Wait Assessment standard changed effective July 2010. Standard now Headway +25%, Actual 2009 has been retroactively changed to reflect new standard.
[2] Subway Terminal OTP standard changed effective June 2010. Historical results, re-calculated for 2009, consist of June through December.
[3] Subways dropped 108 terminal cleaners effective June 2010

Source: Department of Subways, Department of Buses, Office of System Safety (actuals for Wait Assessment, On-Time Performance, and cleaning and air conditioning indicators from Operations Planning)

Table 5

Subway Facilities and Equipment - Spring 2010

Category	Description	Quantity	
Fleet:	Subway Passenger Cars	6,378	
	Work Motor Cars	36	
	Non-motorized Work Train Cars	371	
	Locomotives	72	
Stations:	Subway Stations	468 *	
Infrastructure:	Mainline Track	659	Miles
	Bridges	6	
	Bridges & Overpasses (Land)	78	
	Submarine Tunnels	14	
	Subway Tunnel Length	138	Route Miles
		447	Track Miles
	Subway Tunnel Lighting	500	Track Miles
	Fan Plants	196	
	Pump Rooms	294	
	Elevated Structures	70	Route Miles
		156	Track Miles
	All yards, Shops & Storage Areas (non-revenue)	186	
	Signal Enclosures	670	
	Signal Equipment	41,272	Devices
	Contact Rail Cable	1,050	Miles
	Power Substation Enclosures	215	
	Power Substation Transformers	362	
	Power Substation Rectifiers	357	
	DC Circuit Breakers	1,377	
Facilities:	Railcar Overhaul Shops	2	
	Car Maintenance Shops	14	
	Yards	23	

* Includes 3 closed stations:
Cortlandt Street - World Trade Center (R & W Lines)
Cortlandt Street - World Trade Center (#1 Line)
Aqueduct Racetrack (A Line)

Source: Department of Subways

Table 6

Subway Passenger Car Fleet Roster - Spring 2010

Division/ Car Class	Car Number	# of Cars	Yr. Built	Car Builder	Overhauled
"A" Division:					
51' 4" Cars					
R62	1301 - 1625	315	1984 - 1985	Kawasaki	
R62A	1651 - 2475	824	1985 - 1987	Bombardier	
R110A	8001 - 8010	0	1993	Kawasaki	
R142	1101 - 1250 6301 -7200	1,030	2000 - 2003	Bombardier	
R142A	7211 - 7810	600	2000 - 2005	Kawasaki	
Total		**2,769**			
"B" Division					
60' 6" Cars					
R32	3350 - 3949	240	1964 - 1965	Budd	1988 - 90
R38	3950 - 4149	0	1966 - 1967	St. Louis	1987 - 88
R40	4150 - 4549	0	1968 - 1969	St. Louis	1987 - 89
R42	4550 - 4949	50	1969 - 1970	St. Louis	1988 - 89
R143	8101 - 8312	212	2001 - 2003	Kawasaki	
R160A	8313 - 8712 9233 - 9802 9943 - 9974	1,002	2007 - 2010	ALSKAW - Alstom	
R160B	8713 - 9232 9803 - 9942	660	2007 - 2010	ALSKAW -Kawasaki	
Total		**2,164**			
67' 0" Cars					
R110B	3001 - 3009	0	1993	Bombardier	
75' 0" Cars					
R44	5202 - 5479	136	1972 - 1974	St. Louis	1990 - 92
R46	5482 - 6258	752	1975 - 1977	Pullman	1989 - 91
R68	2500 - 2924	425	1986 - 1988	Westinghouse Amrail	
R68A	5001 - 5200	200	1988 - 1989	Kawasaki	
Total		**1,513**			
Total - All Railcars		**6,446**			

Source: Division of Car Equipment, Department of Subways

Table 7

Subway Locomotive and Work Train Fleet - Spring 2010

Vehicle Type	Total
Flat Cars*	161
Diesel Locomotives	62
Rider Cars	42
Work Motor Cars	36
Crane Cars	39
Hopper Cars	28
Refuse Collection Propulsion	18
Continuous Welded Rail Train Cars	16
Pump and Reach	12
Electric Locomotives	10
Vacuum Train Cars	10
De-Icer Cars	6
Snow Removal (Jet Hurricane)	5
Snow Throwers	4
Tampers	4
Track Geometry Cars	4
Tank Cars	3
Rail Adhesion Cars	3
Rail Grinders	0
Weld Cars	2
Ballast Regulators	2
Signal Supply Cars	2
Track Refuse Collection Cars	10
Work Train Fleet Total	**479**

***includes flats (134 cars) and refuse flats (27 cars)**

Source: Division of Car Equipment, Department of Subways

Table 8

Subway Shops and Yards - Spring 2010

Car Maintenance Shops

"A" Division	"B" Division	Work Equipment
239th Street	Concourse	Pelham Diesel
240th Street	Coney Island Inspection	
Jerome	East New York	
East 180th Street	Jamaica	
Corona	Pitkin	
Pelham	207th Street Inspection	
Livonia		

Railcar Overhaul Shops

Coney Island Overhaul
207th Street Overhaul

Yards

"A" Division	"B" Division
137th Street	36th-38th Streets
148th Street	174th Street
180th Street	207th Street
239th Street	Avenue X
240th Street	Canarsie
Corona	Coney Island
Livonia	Concourse
Mosholu	East New York
Westchester	Fresh Pond
	Jamaica
	Linden
	Pitkin
	Rockaway Park
	Stillwell

Source: Department of Subways

Table 9

Bus Facilities and Equipment - Spring 2010

Category	Description	Year	Quantity
Fleet:	Orion - Orion V CNG	1994	21
	Bus Industries - Orion V	1996	37
	NOVA RTS-06	1996	463
	New Flyer (Articulated)	1997	48
	NOVA RTS-06	1998/99	696
	MCI	1998	106
	New Flyer (Articulated)	1998	40
	MCI	1999	98
	New Flyer Low Floor CNG	1999	188
	New Flyer Viking	1999	3
	Orion - Orion V	1999	347
	Orion CH	1999	4
	Orion - Orion V CNG	1999	23
	MCI	2000	99
	New Flyer (Articulated)	2000	259
	MCI	2001	70
	MCI	2002	119
	New Flyer (Articulated)	2003	259
	Orion - Orion VII CNG	2003	124
	Orion - Orion VII CNG	2004	135
	Orion VII Hybrid	2004	125
	Orion VII Hybrid	2005	200
	Orion VII Hybrid	2006	100
	Orion VII Hybrid	2007	116
	MCI	2007	30
	MCI	2008	19
	Orion VII Hybrid NG	2008	160
	Orion VII Hybrid NG	2009	540
	Designline	2009	4
	Orion VII Hybrid NG	2010	45
	NOVA LF (Articulated)	2010	15
	Total Active Passenger Buses		4,493
Facilities:	Depots		19
	Base Shops/Other Shops (Mtc. Bldgs.)		2/2
	Bus Stops		12,507
Routes:	Local Bus		208
	Express Bus		36

Table 10

Bus Depots by Division - Spring 2010

Division	Depot	Operator
Bronx	Eastchester	MTA Bus Company
	Gun Hill	NYC Transit
	Kingsbridge	NYC Transit
	West Farms	NYC Transit
	Yonkers	MTA Bus Company
Brooklyn - North	East New York	NYC Transit
	Grand Avenue	NYC Transit
	Fresh Pond	NYC Transit
	Spring Creek	MTA Bus Company
Brooklyn - South	Flatbush	NYC Transit
	Jackie Gleason	NYC Transit
	Ulmer Park	NYC Transit
Manhattan	100th Street	NYC Transit
	126th Street	NYC Transit
	Amsterdam	NYC Transit
	M.J. Quill	NYC Transit
	Manhattanville	NYC Transit
Queens - North	Casey Stengel	NYC Transit
	College Point	MTA Bus Company
	LaGuardia	MTA Bus Company
Queens - South	Baisley Park	MTA Bus Company
	Far Rockaway	MTA Bus Company
	JFK	MTA Bus Company
	Jamaica	NYC Transit
	Queens Village	NYC Transit
Staten Island	Castleton	NYC Transit
	Yukon	NYC Transit
Long Island	Garden City	LI Bus
	Rockville Centre	LI Bus

Source: Department of Buses

Table 11

Base Shop Characteristics - Spring 2010

Base Shop Facility	Yr. Built	Sq. Feet	Activity
Grand Avenue	2007	500,000	Revenue vehicle maintenance, engine and body repair, overhauls, upgrades and unit rebuilding
Zerega Avenue	2001	247,000	Revenue vehicle maintenance, engine and body repair, overhauls, upgrades and unit rebuilding
Crosstown Paint Shop	1946	17,000	Vehicle painting
Ninth Avenue Unit Shop	N/A	15,000	Rebuild revenue vehicle components

Source: Department of Buses

Table 12

Staten Island Railway Performance Targets

	Goal 2009	Act. 2009	Proj. 2010	Proj. 2011	Proj. 2012	Proj. 2013	Proj. 2014	Proj. 2015
Mean Distance Between Failures (miles)	180,000	129,824	180,000	180,000	180,000	180,000	180,000	180,000
On-Time Performance (%)	96.5%	95.6%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%

Cleaning

- St. George Terminal: regular cleaning (cleaning station houses, emptying trash receptacles) twice daily (station houses are swept and mopped daily), heavy duty cleaning (steam cleaning outside station houses and platform) every 1.5 months.
- Other stations: regular cleaning each weekday, heavy duty cleaning every two months.
- Graffiti removal within 48 hours of receipt of complaint.
- Stations inspected weekly.
- All passenger cars cleared of litter, mopped, and seats cleared of debris on a daily basis.
- All passenger cars undergoing an exterior car wash monthly between the beginning of May and the end of October.
- All passenger cars undergo an Extraordinary Interior Cleaning (washing, scrubbing, wiping, and polishing) every 45 days.

Air Conditioning

- Air conditioning equipment is inspected on a 66-day cycle.
- Air conditioning condensers are washed out every May, June, July, and August.
- Air filters are replaced every 66 days.

Source: Staten Island Railway

Table 13

Staten Island Railway Facilities and Equipment - Spring 2010

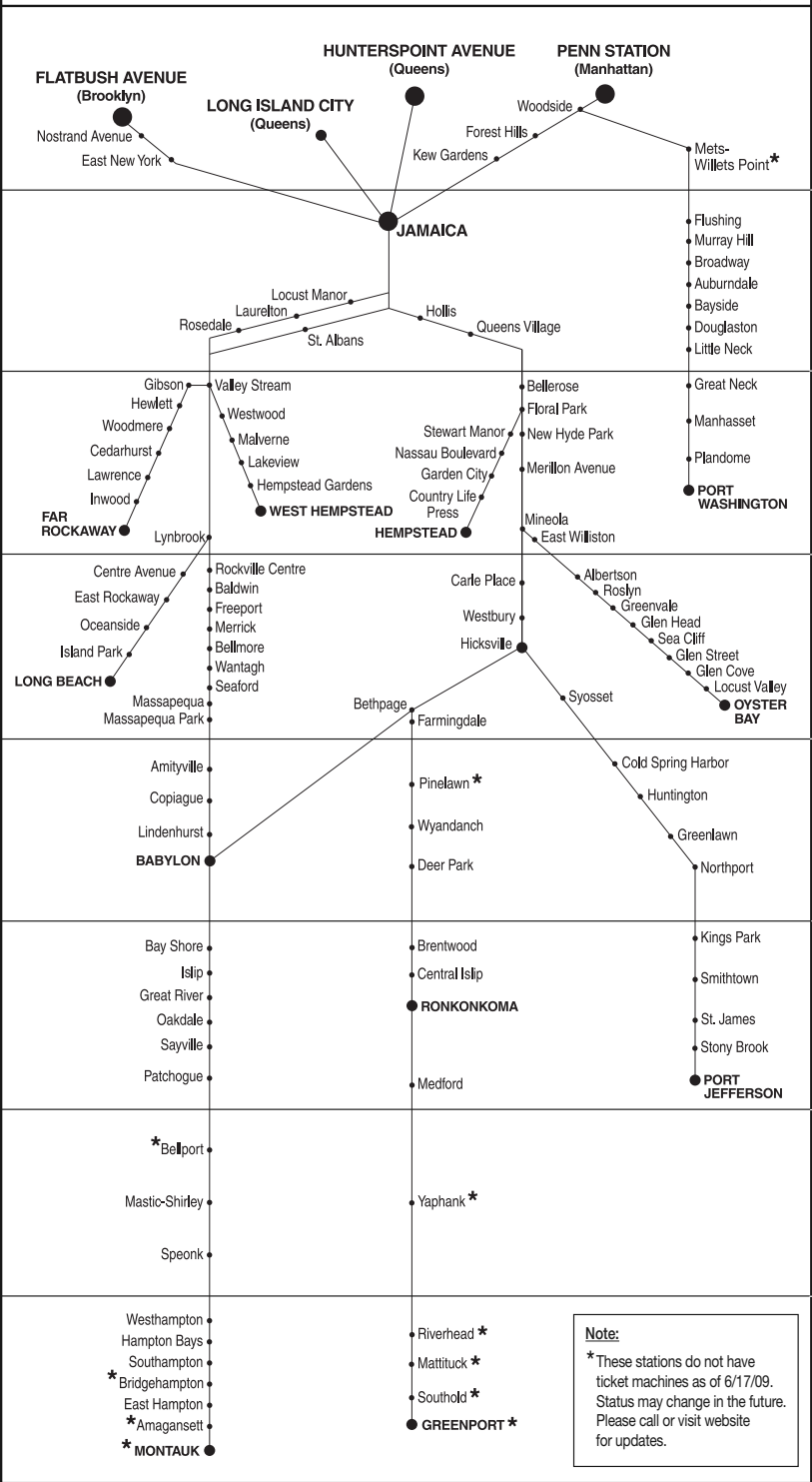
Category	Description	Quantity
Fleet:	Passenger Cars	63
	Work Train Cars	14
	Locomotives	4
	Stations	23
Infrastructure:	Track	28.6
	Bridges	32
	Overpasses	28
	Switches	84
	Power Substations (Enclosures)	5
	St. George	
	Old Town	
	Grant City	
	Eltingville	
	Atlantic	
	Circuit Breaker Houses (Enclosures)	5
	Clifton	
	Dongan Hills	
	New Dorp	
	Prince's Bay	
	Tottenville	
Facilities:	Car Maintenance Shops	1

Source: Staten Island Railway

MTA Long Island Rail Road

LIRR Stations and Fare Zones

Direct Fares Only
Effective Date: June 17, 2009



Note:

*These stations do not have ticket machines as of 6/17/09. Status may change in the future. Please call or visit website for updates.

MTA Long Island Rail Road Service Standards

Vehicle Load Factor

Vehicle load or load factor is a ratio of the number of seats on a vehicle to the number of passengers. Load factor is an indicator of the extent of likely overcrowding or the need for additional vehicles. It is also a means to determine whether the level of service at a particular time is adequate to assure a level of service deemed appropriate for the railroad.

The Long Island Rail Road's load factor standards are designed to be responsive to passenger demands. The average seating capacity of one train car is 115 passengers for M-3 electric cars and 106 passengers for M-7 electric cars. Cars within the LIRR electric fleet operate as married pairs; consists are either 6, 8, 10, or 12 cars. For diesel bi-level coaches, the average seating capacity is 140 passengers per car.

A review of train size is initiated when train loading exceeds or falls below established load point factors. The LIRR goal is to provide adequate seating on trains at all times. 100% of trains should operate with their full complement of cars. The Long Island Rail Road monitors and reviews vehicle load data on an on-going basis and, wherever feasible, reallocates human and equipment resources to meet passenger demand.

The chart below displays the passenger load point at which the Long Island Rail Road considers adding or removing a pair of cars from the consist. The decision to alter the number of cars in the consist is subject to the following factors: finite fleet size (and the inability to procure a small number of cars), car availability, yard capacity, platform length and constraints on platform extension, etc. Where equipment is available, trains between 90-95% seating capacity will be considered for an additional pair of cars. The existence of standees, or the fact that the number of passengers falls into the range listed below, does not guarantee that cars will be added to that train.

Electric			**Customer Load Range**			
	Seating Capacity		**Peak**		**Off Peak**	
Cars	**M-3**	**M-7**	**Reduce Cars**	**Increase Cars**	**Reduce Cars**	**Increase Cars**
6	690	636	NA	604	NA	572
8	920	848	541	806	509	763
10	1150	1060	721	1007	678	954
12	1380	1272	901	NA	848	NA

Diesel		Customer Load Range			
	Seating Capacity	Peak		Off Peak	
Cars	C-3	Reduce Cars	Increase Cars	Reduce Cars	Increase Cars
2	280	119	252	112	238
3	420	238	378	224	357
4	560	357	504	336	476
5	700	476	630	448	595
6	840	595	756	560	714
7	980	714	882	672	833
8	1120	833	1008	784	952
9	1260	952	1134	896	1071
10	1400	1071	1260	1008	1190
11	1540	1190	1386	1120	1309
12	1680	1309	NA	1232	NA

Service Frequency/Vehicle Headway

Service Frequency measures how often a train is scheduled to stop at a particular station. Service frequency is based upon the station's Level of Service. When determining service frequency, availability of equipment, track scheduling and operating resources are also taken into account.

The LIRR's Headway standards are based upon station Level of Service. Maximum vehicle headway differs for peak and off-peak period, and weekends. The LIRR considers morning peak to be trains arriving at western terminals between 6:00 am and 10:00 am weekdays, and the evening peak to be trains departing western terminals between 4:00 pm and 8:00 pm weekdays.

The Station Levels of Service are a measure of the number of customers that utilize a particular station each weekday. The Long Island Rail Road uses Station Levels of Service to allocate the appropriate level of service for such areas as station maintenance, station amenities, schedule frequency, and other areas. Station Levels of Service provide an equitable way of allocating operating and capital resources within the LIRR. Stations Levels of Service are based upon the data obtained from the most recent station-by-station boarding counts.

Level 1: More than 6,000 customers per day
Level 2: 2,000-6,000 customers per day
Level 3: 1,000-1,999 customers per day
Level 4: Fewer than 1,000 customers per day.

Commuter Zone Level of Service*

The chart below presents the maximum vehicle headway by station level of service and time of day for stations within the LIRR Commuter Zone:

Level of Service	Weekday Peak	Off-Peak	Weekend
Level 1**	20 minutes	60 minutes	60 minutes
Level 2	30 minutes	60 minutes	60 minutes
Level 3	45 minutes	90 minutes	90 minutes
Level 4	60 minutes	120 minutes	120 minutes

* These standards do not apply for the time period of midnight to 6 am. Commuter Zone includes all stations in Zones 1-12. Zone 14 stations, Shea Stadium and Belmont are considered outside of the Commuter Zone.

** Due to infrastructure constraints, Huntington and Ronkonkoma do not provide peak service at this headway. These constraints include: single track territory East of Farmingdale, existence of only two tracks West of Hicksville and lack of a yard East of Huntington. Hunterspoint Avenue station does not provide service at Level 1 headways because this station is unique, with only weekday peak-period, peak-direction service.

Reliability/Schedule Adherence

At the Long Island Rail Road, a train is recorded as on time if it arrives at its final destination within 5 minutes and 59 seconds of its scheduled arrival. 100% of trains operated should complete their assigned trips. Unless noted on passenger timetable, trains will not depart early from passenger stations where they are scheduled to receive passengers.

Vehicle Assignment

Vehicle assignment refers to the process by which transit vehicles are assigned to routes throughout the system.

Electric Multiple Unit (EMU) passenger cars are operated on all electrified branches. In the LIRR territory that is not electrified, diesel locomotive hauled bi-level coaches are utilized. The LIRR's diesel fleet includes Diesel/Electric and Dual Mode locomotives. The Dual Mode equipment is capable of utilizing electric traction power and operating through the East River tunnels into Penn Station, thus providing a "one seat ride" from diesel territory to Penn Station.

Both electric and diesel cars are assigned as required without regard to car age. Electric and diesel cars have the same amenities – air conditioning, heating, and restrooms (in odd-numbered cars) for passenger comfort and convenience.

Cars are not assigned to specific routes or branches within the territory they operate in (diesel or electric), but are cycled from branch to branch and rotated on a car maintenance basis. To achieve optimum car utilization efficiency of both electric and diesel equipment, cars are cycled from branch to branch.

Mechanical System

Interior and exterior lights, doors, electronic signs/voice annunciator, and PA system should be operational on all trains.

Heating Ventilation Air Conditioning {HVAC} System

At least 97% of cars entering passenger service should have heating, ventilation and air conditioning systems which provide an interior temperature between 64 and 78 degrees Fahrenheit.

Cleanliness Standards

Rolling Stock

All train sets prior to entering morning peak service will undergo the following: Floors are cleared of litter and mopped, seats cleared of debris, bathrooms cleaned and stocked.

Except if the outside temperature is 38 degrees F or below, all diesel coaches will undergo an exterior wash at least once every two weeks and all EMU cars will undergo an exterior wash at least once every three weeks.

MU cars will undergo an Extraordinary Interior Cleaning (EIC) once every 60 days, diesel coaches once every 90 days.

All Multiple Unit (MU) cars equipped with toilets will have the system serviced once during a 3-day period of active service; C-3 coaches are serviced once every 5 days.

Extraordinary Interior Cleaning (EIC) is the highest level of cleaning performed on the LIRR and involves washing, scrubbing, wiping and polishing of the interior of the car.

Lay-up cleaning, which is done in the yards, is the most comprehensive effort of the railroad's daily cleaning programs. It consists of complete removal of all debris, a full sweep of the entire car, a complete mopping of entire car and full cleaning of bathroom compartment. In addition, the Motorman's Cab receives a complete cleaning (swept and mopped) and windshield of the cab is cleaned on the East and West ends of the train. The LIRR goal is to provide this type of cleaning to all in-service cars prior to the morning rush period. The LIRR's other daily cleaning activity, which is performed at terminal stations, involves daily upkeep cleanings throughout the day including sweep/spot mopping, sweep only, pickups, etc.

Station Appearance

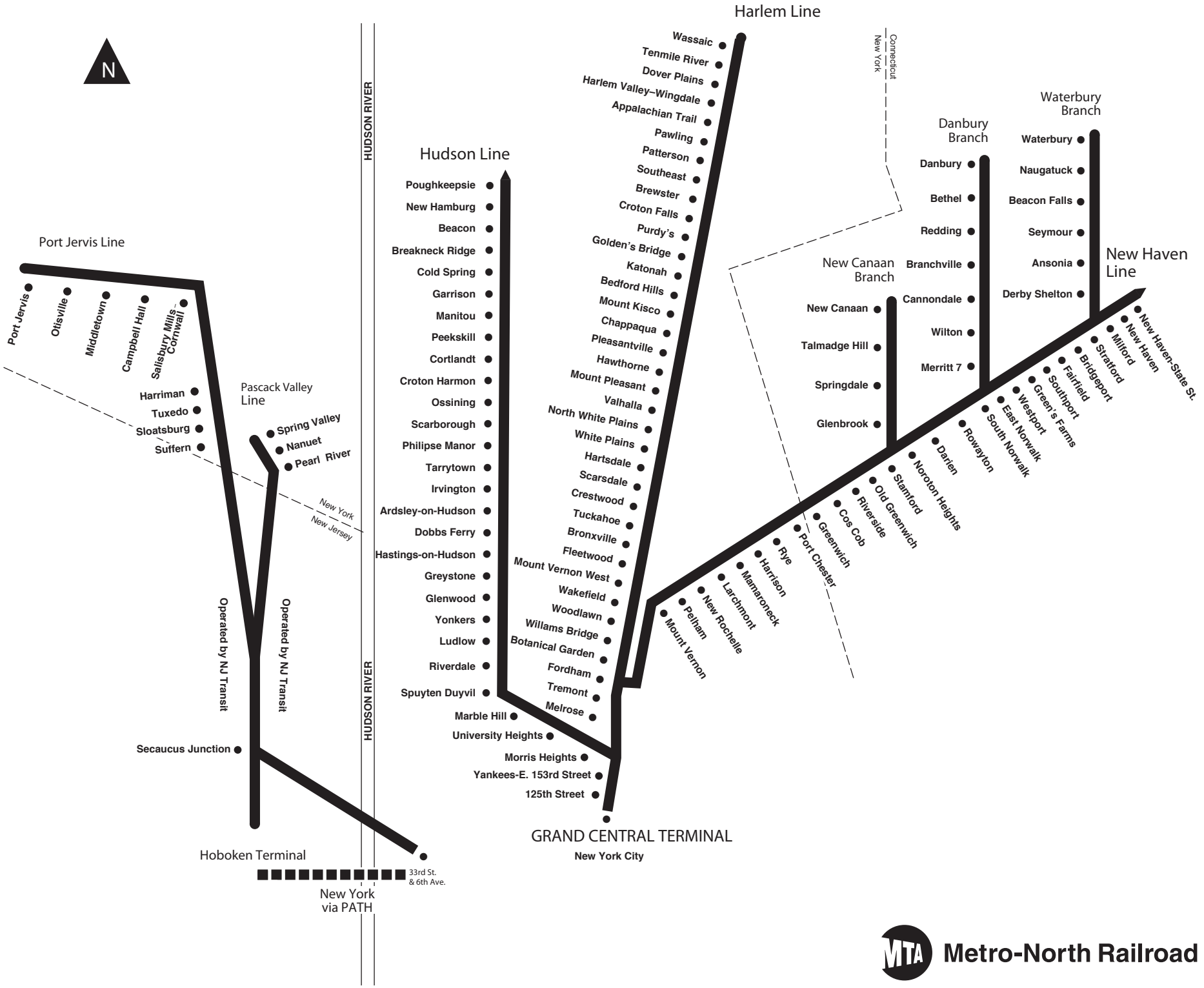
The following matrix defines minimum maintenance service provided by the LIRR based on the level of customer use:

	Level 1	Level 2	Level 3	Level 4
Regular Station Cleaning	Twice Daily	Daily	Daily	Alternate Days
Heavy Duty Cleaning	1 ½ Months	3 Months	4 Months	As needed
Graffiti Removal	48 Hours	72 Hours	96 Hours	96 Hours
Station Painting	4 Years	6 Years	8 Years	10 Years
Station Safety Audit	6 times/yr	4 times/yr	3 times/yr	2 times/yr

Notes:

1. Regular station cleaning includes cleaning station buildings, waiting rooms, passenger shelters, and platforms to a litter-free level of cleanliness; emptying trash receptacles and sweeping, mopping, and stocking public lavatories, where provided.
2. Heavy Duty cleaning includes hot water pressure washing of station structures, platforms, shelters, and high platform waiting rooms, as weather conditions permit.
3. “Graffiti removal” refers to the response time from receipt of complaint to actual removal of graffiti.
4. Obscene graffiti is removed within 18 hours of notification.
5. Branch Line Managers submit work orders to Engineering for any supplemental painting and repair that needs to be undertaken.
6. Branch Line Managers and Terminal Managers conduct Station Safety Audits, inspecting every aspect of the station environment. In addition, System Safety, Risk Management, and the Structures Division of the Engineering Department also conduct station inspections.

MTA Metro-North Railroad


N
HUDSON RIVER
HUDSON RIVER
Port Jervis Line
Port Jervis
Otisville
Middletown
Campbell Hall
Salisbury Mills-Cornwall
Harriman
Tuxedo
Sloatsburg
Suffern
Pascack Valley Line
Spring Valley
Nanuet
Pearl River
New York
New Jersey
Operated by NJ Transit
Operated by NJ Transit
Secaucus Junction
Hoboken Terminal
33rd St. & 6th Ave.
New York via PATH
Hudson Line
Poughkeepsie
New Hamburg
Beacon
Breakneck Ridge
Cold Spring
Garrison
Manitou
Peekskill
Cortlandt
Croton Harmon
Ossining
Scarborough
Philipse Manor
Tarrytown
Irvington
Ardsley-on-Hudson
Dobbs Ferry
Hastings-on-Hudson
Greystone
Glenwood
Yonkers
Ludlow
Riverdale
Spuyten Duyvil
Marble Hill
University Heights
Morris Heights
Yankees-E. 153rd Street
125th Street
Harlem Line
Wassaic
Tenmile River
Dover Plains
Harlem Valley–Wingdale
Appalachian Trail
Pawling
Patterson
Southeast
Brewster
Croton Falls
Purdy's
Golden's Bridge
Katonah
Bedford Hills
Mount Kisco
Chappaqua
Pleasantville
Hawthorne
Mount Pleasant
Valhalla
North White Plains
White Plains
Hartsdale
Scarsdale
Crestwood
Tuckahoe
Bronxville
Fleetwood
Mount Vernon West
Wakefield
Woodlawn
Williams Bridge
Botanical Garden
Fordham
Tremont
Melrose
Mount Vernon
Pelham
New Rochelle
Larchmont
Mamaroneck
Harrison
Rye
Port Chester
Greenwich
Cos Cob
Riverside
Old Greenwich
Stamford
Noroton Heights
Darien
Rowayton
South Norwalk
East Norwalk
Westport
Green's Farms
Southport
Fairfield
Bridgeport
Stratford
Milford
New Haven
New Haven-State St.
GRAND CENTRAL TERMINAL
New York City
Connecticut
New York
New Canaan Branch
New Canaan
Talmadge Hill
Springdale
Glenbrook
Danbury Branch
Danbury
Bethel
Redding
Branchville
Cannondale
Wilton
Merritt 7
Waterbury Branch
Waterbury
Naugatuck
Beacon Falls
Seymour
Ansonia
Derby Shelton
New Haven Line
MTA
Metro-North Railroad

Metro-North Railroad Service Standards

Vehicle Load Factor Analysis

Metro-North is committed to the goals of providing a seat for every customer and increasing the fare operating ratio. A primary method of controlling costs without negatively impacting service, and thereby achieving a higher fare recovery ratio, is reducing car miles. In order to provide the framework to accomplish the above goals, loading standards were established. Vehicle occupancy or load factor is a percentage ratio of a train's maximum ridership load divided by its seating capacity. Within operational constraints, (e.g., required short equipment turns, which often dictate that extra equipment be operated on certain trains) these loading standards are used to determine equipment assignments on all Metro-North trains and may result in either lengthening or shortening of train consists. A consist is the equipment type and number of cars that are scheduled to make up an individual train.

Metro-North's loading standards establish criteria for lengthening or shortening trains. Current Metro-North loading standards for all Harlem, Hudson and New Haven Line trains during the time periods outlined below are as follows:

Maximum Recommended Occupancy for:

	Lengthening Trains	Shortening Trains
Peak/Reverse Peak New Haven	95%	95%
Off-Peak Weekday and Reverse Peak H/H	85%	85%
Weekend	80%	80%

These standards are applied against peak trains consisting of four (4) to twelve (12) cars (based on ridership demand) and reverse peak and weekend trains, which usually consist of eight (8) cars. The maximum load count is calculated based on when the most riders are on board a train during its scheduled run. For example, the maximum load point for most peak service trains is into Grand Central Terminal in the morning and out of Grand Central Terminal in the evening.

Service Frequency/Vehicle Headway

Metro-North's long-term Service Plan outlines the frequency of service for station groupings and line segments for current and future train service based on existing and projected ridership. Metro-North designates the morning (AM) Peak service to be weekdays inbound from 5:00 a.m. to 10:00 a.m. and outbound from 5:00 a.m. to 9:00 a.m. The evening (PM) Peak is defined to be weekdays outbound from 4:00 p.m. to 8:00 p.m. This is based on Grand Central Terminal arrival and departure times. During the morning and evening Peak periods, Metro-North's headway between trains is approximately 20-30 minutes. Branch line service during the peaks is less frequent. Off-peak and weekend service frequency is typically 30-60 minutes with the exception of some branch lines (e.g., Danbury, Waterbury and Wassaic) which operate less frequently.

Vehicle Assignment

Metro-North operates both diesel and electric powered vehicles. The primary criterion used by Metro-North in assigning transit vehicles is based on the type of power required

for a particular line segment. Diesel locomotives are used on non-electrified territory (Upper Hudson, Wassaic, Danbury and Waterbury service). The Bombardier coaches are used on diesel trains. These coaches have been purchased during the past 25 years (an initial order of end door cars designated push-pull (PP) and two subsequent orders of center door (CD) cars).

Metro-North assigns electric powered vehicles (multiple unit cars - M-2, M-3, M-4, M-6 and M-7 cars) to those line segments that are electrified (third rail/catenary).

Metro-North developed the loading standards discussed above and continually monitors ridership patterns to determine the assignment of electric vehicles and diesel coaches to individual trains.

Mechanical System

Interior and exterior lights, doors, electronic signs/voice annunciator, and PA system should be operational on all trains.

Air Conditioning Standards

100% of cars entering passenger service should have operational air conditioning systems. The Air Conditioning Standard for in-service cars is a minimum of 98% functional at all times.

Cleanliness Standards

Rolling Stock

Extraordinary Interior Cleaning (EIC) is the highest level of cleaning performed on Metro-North's fleet and involves washing, scrubbing, wiping and polishing of the interior of the car.

Layover cleaning is the most comprehensive effort of Metro-North's daily cleaning programs. It consists of complete removal of all debris, a full sweep of an entire car, a complete mopping of the entire car and full cleaning of bathroom compartments. The goal is to provide this type of cleaning to all in-service cars prior to the morning rush period.

Turnaround Cleaning shall be performed after every run, providing the car stays at the terminus for more than one (1) hour. This cleaning includes the removal of debris, spot mopping, wiping down of bathrooms and resupplying as necessary.

Trains will be **Quick Cleaned** after every run when they stay at their terminus for less than one (1) hour. No debris should be visible in the car while walking down the aisle, under the seats or in the toilet department. All newspapers will be removed and placed in recycling bins.

All cars equipped with recirculating toilets will have the toilets serviced at least once every twenty-four (24) hours. All cars equipped with toilets utilizing a holding tank are to be serviced at least every forty-eight (48) hours.

Stations

All Metro-North stations are cleaned daily. Work includes the waiting room, restrooms, platforms and recycling containers.

E-Cleaning is on a 45 day cycle and is performance Monday to Friday. Stations that are used less frequently are cleaned on a 60 day cycle. E-Cleaning is an extraordinary cleaning consisting of the following:

1. Power wash all platforms and canopies (where applicable).
2. Power wash and deodorize overpasses; including walls, stairways and drains.
3. Power wash and deodorize underpasses, including walls, stairways and drains.
4. Power wash and squeegee exterior windows.
5. Power wash and squeegee all shelter windows.
6. Remove graffiti, and dirt from all station areas: buildings, walls, windows, etc.
7. Clean all signage, kiosks and recycling containers.
8. Clean and deodorize waiting rooms and customer areas.
9. Clean and deodorize bathrooms.
10. Strip and wax waiting room floors and hallways.
11. Polish all stainless steel elevators.
12. Wash and deodorize elevator floors.
13. Wash and squeegee interior windows, ledges and sills.
14. Clean and polish all woodwork.
15. Clean and polish tile.
16. Police all areas around station buildings, platforms and stairs.
17. Pull trash as needed.
18. Trim all overgrowth of bushes and weeds around station buildings, platforms and customer areas.