TPO RESOLUTION #06-18

RESOLUTION ADOPTING MIAMI-DADE TRANSPORTATION AND PUBLIC WORKS FISCAL YEAR 2018-2019 STATE OF GOOD REPAIR PERFORMANCE TARGETS FOR THE METROPOLITAN PLANNING AREA

WHEREAS, the Interlocal Agreement creating and establishing the Miami-Dade Metropolitan Planning Organization (MPO), for the Miami Urbanized Area, now known as the Transportation Planning Organization (TPO), requires that the TPO provide a structure to evaluate the adequacy of the transportation planning and programming process; and

WHEREAS, Moving Ahead for Progress in the 21st Century Act (MAP-21) requires each transit agency to establish performance targets for State of Good Repair (SGR); and

WHEREAS, to advance these efforts, the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) instituted the Transit Asset Management (TAM) Final Rule, mandating transit providers set SGR performance targets; and

WHEREAS, TAM focuses on identifying and prioritizing maintenance and repair needs of transit vehicles and infrastructure; and

WHEREAS, TAM regulations are critical as they may lower costs, increase reliability/performance, reduce travel delays for passengers, promote resilience and yield system safety improvements; and

WHEREAS, in compliance with the TAM, the Department of Transportation and Public Works (DTPW) submitted its proposed SGR Performance targets for Fiscal Year 2018-2019; and

WHEREAS, the companion Planning Rule requires adoption of the SGR targets by the TPO no later than June 30 of the reporting year,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE TRANSPORTATION PLANNING ORGANIZATION IN ITS ROLE AS THE MPO FOR THE MIAMI URBANIZED AREA, this Board hereby adopts Miami-Dade Department of Transportation and Public Works Fiscal Year 2018-2019 State of Good Repair Performance Targets for the Metropolitan Planning Area.

The adoption of the foregoing resolution was moved by Board Member Rebeca Sosa. The motion was seconded by Board Member Sally A. Heyman, and upon being put to a vote, the vote was as follows:

Chairman Esteban L. Bovo, Jr.-Aye Vice Chairman Francis Suarez-Absent

Board Member Bruno A. Barreiro	-Aye	Board Member Vince Lago	-Aye
Board Member Juan Carlos Bermudez	-Absent	Board Member Daniella Levine Cav	a -Aye
Board Member Jose "Pepe" Diaz	-Absent	Board Member Roberto Martell	-Aye
Board Member Audrey M. Edmonson	-Aye	Board Member Joe A. Martinez	-Absent
Board Member Dan Gelber	-Absent	Board Member Jean Monestime	-Aye
Board Member Oliver G. Gilbert, III	-Absent	Board Member Dennis C. Moss	-Absent
Board Member Perla Tabares Hantman	-Aye	Board Member Jeff Porter	-Absent
Board Member Carlos Hernandez	-Absent	Board Member Rebeca Sosa	-Aye
Board Member Sally A. Heyman	-Aye	Board Member Javier D. Souto	-Aye
Board Member Barbara J. Jordan	-Aye	Board Member Xavier L. Suarez	-Aye
Board Member Smith Joseph	-Aye		

The Chairperson thereupon declared the resolution duly passed and approved this 25th day of January, 2018.

TRANSPORTATION PLANNING ORGANIZATION

Rv

Zainab Salim, Clerk Miami-Dade TPO IN ITS
ROLE AS
MIAMIDADE MPO

TPO

Memorandum



Date:

December 11, 2017

To:

Zainab Salim, Board Administrator Transportation Planning Organization

From:

Alice N. Bravo, P.E., Director

Department of Transportation and Public Works

Subject:

Request for Placement on the Agenda

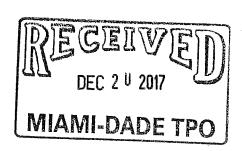
On January 18, 2017, the Federal Transit Administration (FTA) forwarded a letter of upcoming timeframes to meet requirements of the Transit Asset Management (TAM) Final Rule. This Rule requires Miami-Dade County Department of Transportation and Public Works (DTPW) to set performance targets for the State of Good Repair (SGR) every calendar year by January 1st. The Transportation Planning Organization (TPO) must approve and establish targets within 180 days, no later than June 30th of the reportable year.

This item is critical for DTPW to be in compliance with Federal regulations governed under Moving Ahead for Progress in the 21st Century Act of 2012 (MAP-21). It focuses on identifying and prioritizing maintenance and repair needs of transit vehicles and infrastructure, which may lower the cost, increase reliability and performance, reduce travel delays for passengers, promote resilience, and yield system safety improvements. MAP-21 mandates the development of performance-driven results-based program that would provide a greater level of transparency and accountability, improve project decision-making, and more efficient investment of Federal transportation funds.

I respectfully request placement of this item onto the January 25, 2018, TPO agenda to ensure we maintain a safe and reliable transit service to the residents and visitors of Miami-Dade County.

Attachments

c: Alina T. Hudak, Deputy Mayor



Miami-Dade County
Department of Transportation & Public Works

State of Good Repair Performance Targets

Fiscal Year 18/19



In accordance with the Moving Ahead for Progress in the 21st Century Act (MAP–21) (Pub. L. 112–141 (2012), codified at 49 U.S.C. 5326) Planning Rule, each transit agency is required to establish performance targets for State of Good Repair (SGR). The new rule requires development of a performance-driven and outcome-based program to strengthen the infrastructure of the United States Transportation System. In response to this requirement, the Miami-Dade County Department of Transportation and Public Works (DTPW) approves and adopts the established State of Good Repair Performance Targets for Fiscal Year 2018-2019.

Date: $\frac{12-11-1}{1}$

As hereby certified by:

Alice N. Bravo, P.E.

Director / Accountable Executive

Miami-Dade Department of Transportation and Public Works

Transit Asset Management Reportable Inventories

An asset inventory is a register or comprehensive list of the agency's assets and specific information about the assets. It is intended to provide consistent information across all asset classes to support enterprise-level business processes, including capital improvement programming. The agency is responsible for determining what should be included in the asset inventory, how the inventory should be organized, and the critical information that is needed to manage the items in the asset inventory over assets life-cycle in accordance with the Final Rule. There are four (4) types of inventories classifications required to support the Federal mandate:

- Transit Asset Management Plan Inventory
- Condition Assessment Inventory
- ❖ National Transit Database Inventory (NTD)
- State of Good Repair Inventory Targets Performance Targets/Performance Measures

Performance Measures and Targets Requirements					
Asset Category	Performance Targets	Performance Measures			
Rolling Stock	Includes all types of passenger carrying rolling stock, including bus and rail. Targets are set for each mode but does not include emergency contingency vehicles.	Percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB). The ULB can be FTA default or Agency defined.			
Equipment	Three (3) classes of vehicles are collected and used for target setting: Automobiles, Trucks & Other Rubber Tire Vehicles, and Steel Wheel Vehicles.	Percentage of non-revenue service vehicles (by type) that exceed the useful life benchmark (ULB). The ULB can be FTA default or Agency defined.			
Facilities	Targets are set for Administrative/Maintenance and Passenger/Parking facilities with partial or full capital replacement responsibility.	Percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.			
Infrastructure	Targets only include track with full or partial capital replacement responsibility.	Percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile.			

Total fleet does not include vehicles that were in use part of the year but were sold or scrapped, and therefore, do not appear on the agency's books at the fiscal year end.

Additional information is collected for each asset category. However, this data is not required for setting or reporting Performance Measures and Targets.

Note: Contracted Service Life for revenue and non-revenue vehicles at the Transportation and Public Works Department varies from the FTA's Useful Life Benchmark (ULB).

REVENUE SERVICE VEHICLES

By definition, one target is set for each mode/class/asset type within the Agency's Inventory. If multiple fleets exists within one asset type of different service age, the fleets must be combined to calculate the performance metric percentage of the asset type and to set the following fiscal years target. Specifically, vehicles with similar characteristics are grouped together as a class/type. As an example, Minibus and Cutaway vehicles are classified as small revenue buses therefore they are grouped and are presented as a single performance target.

ASSET CATEGORY	ASSET CLASS / ASSET TYPE	FLEET SIZE	FLEET AGE	USEFUL LIFE (ULB)	FY18 TARGET	FY 18 PERFORMANCE METRIC (% Exceeding ULB)	FY 19 TARGET
	Minibus (BU)	79	9.8	10	96%	2%	68%
	Cutaway (CU)	30	0.2	10	N/A	Z70	0870
-	Over-The-Road (BU)	12	11.4	14	0%		43%
Rolling	Commuter Bus (BU)	9	5.0	14	N/A	43%	
Stock	40 Foot Bus (BU)	723	13.0	14	59%	45/0	4370
-	Articulated Bus (BU)	89	3.2	14	0%		
	Metrorail (HR)	142	31.2	31	90%	96%	71%
	Metromover (AG)	48	13.8	20	0%	40%	40%_

Paratransit and Contingency vehicles are not calculated in the performance metric based on SGR Reporting requirements. See TAM/NTD Crosswalk table for clarification.

Performance Metric Variance / Forecasted Changes

- a) Minibus / Cutaway (Small Buses) Addition of thirty (30) new small buses and sale of five (5) small buses have adjusted the overall fleet age, performance metrics target and forecasted target.
- b) Large Bus Fleet Due to the anticipated receipt of a fleet of one hundred and ten (110) Compressed Natural Gas Vehicles, the correction of the total count of large buses (previously double counted artic buses), sale of large vehicles and reclassification of the articulated fleet; the performance metrics has decreased.
- c) Metrorail (Heavy Railcars) Addition of six (6) pre-acceptance vehicles FY17 and projection of fifty (50) additional vehicles prior to 9/30/18; the performance metrics has decreased.
- d) Metromover (Automated Guideway) Useful Life Benchmark (ULB) adjustment from 31yrs to 20yrs per vendor signed contract.

NON-REVENUE VEHICLES

By rule, there are multiple asset classifications that are grouped within the 'Equipment' category that must be included in the comprehensive Transit Asset Management Inventory. However, Non-Revenue Vehicles are the only reportable assets used to set and measure performance targets. Within this asset type, the reportable classes are limited to automobiles, trucks & other rubber tire vehicles and steel wheel vehicles.

ASSET CATEGORY	ASSET CLASS / ASSET TYPE	FLEET SIZE	FLEET AGE	USEFUL LIFE BENCHMARK (ULB)	FY 18 TARGET	FY 19 TARGET
Equipment S	Automobile	103	6.8	8	49%	40%
	Steel Wheel Vehicles	7	23.7	25	89%	71%
	Trucks & Other Rubber Tire Vehicles	159	15.1	14	49%	55%

Equipment with an acquisition value that exceeds \$50,000.00 such as construction and maintenance equipment (cranes, prime mover, fork lifts, solar panels battery packs and generators) are not calculated in the performance metric based on SGR Reporting requirements.

Performance Metric Variance / Forecasted Changes

- a) Automobiles Addition of six (6) new Mobility Vehicles, sale of a vehicle, and the correction of the model years of many of the vehicles has reduced the fleet age, performance metrics target and forecasted target.
- b) **Steel Wheel Vehicles** Reclassification of a couple of vehicles based on the revised definition has decreased the fleet age and the performance metrics.
- c) **Trucks & Other Rubber Tire Vehicles** Reclassification of the several vehicles based on the revised definition has increased the total number of vehicles, fleet age and the performance metrics.

FACILITIES

The rule requires that percentage of facilities by group that are below 3.0 on the Transit Economic Requirements Model (TERM) Scale are measured and reported. The condition data is grouped into two classes:

- (1) Administrative & Maintenance
- (2) Passenger & Parking

Although the Performance Metrics is at the higher hierarchy level of Asset Class; additional reporting is required for the sub-categories of the asset classes.

ASSET CATEGORY	ASSET CLASS	ASSET CLASS / ASSET TYPE	NUMBER OF REPORTABLE FACILITIES	FACILITIES ASSESSED	FY 18 PERFORMANCE METRIC (< 3 on TERM Scale)	FY 19 TARGET
		Service & Inspection	5	0		
		Heavy Maintenance & Overhaul	1	0		
		Administrative / Sales Offices	2	0		
		Vehicle Washing	5	0	•	0%
		Revenue Collection	4	0	0%	
	Maintenance & Administrative	Combined Administrative & Maintenance	2	0		
		Vehicle Testing	1	0		
Facilities		Vehicle Blow-Down	3	0		
		Vehicle Fueling	4	0		
		General Purpose Maintenance Facility/Depot	4	0		
		Other	10	0		
		Bus Transfer Center	28	0		:
	Passenger &	Elevated Fixed Guideway Station	44	0		
	Parking	Parking Structure	6	0	0%	0%
		Surface Parking Lot	30	0		
		Other	6	0		

Facility Condition Assessments have been developed. Currently none of the facilities have received an initial assessment. Software is under development to capture and store future assessments.

INFRASTRUCTURE

Infrastructure measure is the percentage of track segments by mode that has incurred performance restrictions. The performance measure only applies to rail fixed guideway systems. It is also important to note that speed restrictions on a specific track segment may be caused by issues with any class of rail infrastructure, not solely the track elements.

ASSET CATEGORY	ASSET CLASS	SYSTEM (TRACK FEET)	TOTAL PERFORMANCE RESTRICTIONS	FY 18 PERFORMANCE METRIC (% Performance Restrictions)	FY 19 TARGET
	Rail Fixed Guideway	298,957	4	1.39%	0%
Infrastructure	Mover Automated Guideway	46,464	0	0%	0%

Infrastructure performance restrictions are being developed to capture the data as outlined by the revised definition. The affected asset type will be identified in future reporting. Currently, the data is captured and reported at the highest level.

Guideway Performance Restrictions Requirements

- a) A performance restriction is defined to exist on a segment of rail fixed guideway when the maximum permissible speed of transit vehicles is set to a value that is below the guideway's full service speed. This does not include the operationally modified design speed.
- b) The length of track miles under restrictions each month and must be calculated separately for each combination of rail fixed guideway modes and service types (Metrorail and Metromover).
- c) All restrictions are documented to the specific segment of track (except system-wide restrictions due to inclement weather, for example) are required to be included in the calculation, regardless of cause or duration, including temporary speed restrictions placed due to maintenance activity.
- d) An annual value for the length of track miles under performance restrictions to FTA by averaging the values calculated each month over the course of the year (DTPW reports on a fiscal year October to September).

Supporting Documents



FEDERAL TRANSIT ADMINISTRATION

TAM Performance Measures

Background

In 2012, MAP-21 mandated FTA to develop a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle. The TAM Final Rule 49 USC 625 became effective Oct. 1, 2016 and established four performance measures. The performance management requirements outlined in 49 USC 625 Subpart D are a minimum standard for transit operators. Providers with more data and sophisticated analysis expertise are allowed to add performance measures and utilize those advanced techniques in addition to the required national performance measures.

Performance Measures

Rolling Stock: The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB).

Equipment: The percentage of non-revenue service vehicles (by type) that exceed the ULB.

Facilities: The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.

Infrastructure: The percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile.



TRANSIT ASSET WANAGEWENT

Data To Be Reported - Optional Report Year 2017, Mandatory Report Year 2018

Rolling Stock: The National Transit Database (NTD) lists 23 types of rolling stock, including bus and rail modes. Targets are set for each mode an agency, or Group Plan Sponsor, has in its inventory.

FTA default ULB or Agency customized ULB: Default ULBs represent maximum useful life based on the TERM model. Agencies can choose to customize based on analysis of their data OR they can use the FTA provided default ULBs.

Equipment: Only 3 classes of non-revenue service vehicles are

collected and used for target setting: I) automobiles, 2) other rubber tire vehicles, and 3) other steel wheel vehicles.

Facilities: Four types of facilities are reported to NTD. Only 2 groups are used for target setting 1) Administrative and Maintenance and 2) Passenger and Parking.

Infrastructure: The NTD lists 9 types of rail modes; the NTD collects data by mode for track and other infrastructure assets.

BRT and Ferry are NTD fixed guideway modes but are not included in TAM targets.

TAM Performance Metrics: The NTD collects current year performance data. The NTD will collect additional Asset Inventory Module (AIM) data but targets forecast performance measures in the next fiscal year.

TAM Narrative Report: The TAM Rule requires agencies to submit this report to the NTD annually. The report describes conditions in the prior year that led to target attainment status.

www.transit.dot.gov/TAM/ULBcheatsheet



TERM Scale: Facility condition assessments reported to the NTD have one overall TERM rating per facility. Agencies are not required to use TERM model for conducting condition assessment but must report the facility condition assessment as a TERM rating score.

What You Need to Know About Establishing Targets

TERM Rating	Condition	Description
Excellent	4.8–5.0	No visible defects, near-new condition.
Good	4.0–4.7	Some slightly defective or deteriorated components.
Adequate	3.0–3.9	Moderately defective or deteriorated components.
Marginal	2.02.9	Defective or deteriorated components in need of replacement.
Poor	1.0-1.9	Seriously damaged components in need of immediate repair.

Include:

- Only those assets for which you have direct capital responsibility.
- Only asset types specifically referenced in performance measure. **Group Plans:**
- Only one unified target per performance measure type.
- Sponsors may choose to develop more than one Group Plan.

MPOs:

- MPOs must establish targets specific to the MPO planning area for the same performance measures for all public transit providers in the MPO planning area within 180 days of when the transit provider establishes its targets.
- Opportunity to collaborate with transit providers.

Example Target Calculations

Rolling Stock and Equipment: Each target is based on the agency's fleet and age. Agencies set only one target per mode/class/asset type. If an agency has multiple fleets in one asset type (see example BU and CU) of different service age, it must combine those fleets to calculate the performance metric percentage of asset type that exceeds ULB and to set the following fiscal year's target. The performance metric calculation does not include emergency contingency vehicles.

Asset Category	Vehicle Class/Type	Fleet Size	Vehicle age	default ULB	FY 16 Performance Metric (% Exceeding ULB)	FY17 Target
	Over the road	10	5	14 years		
	bus (BU)	15	13	14 years	0%	60%
	Cutaway bus	19	8	10 years		
Rolling Stock	(CU)	5	12	10 years	21%	21%
JEGER	Mini Van (MV)	5	5	8 years	0%	0%
	Van (VNI)	I	10	8 years		
	Van (VN)	2	5	8 years	67%	67%
Equipment	Auto (AO)	5	4	8 years	0%	0%

This example assumes no new vehicle purchases in the calculation of targets for FY17, therefore the FY17 target for over the road bus (BU) increases due to the second fleet vehicles aging another year and exceeding the default ULB. If an agency is more conservative, then it might set higher value targets. If an agency is more ambitious or expects funding to purchase new vehicles, then it might set lower value targets.

There is no penalty for missing a target and there is no reward for attaining a target. Targets are reported to the NTD annually on the A-90 form. The fleet information entered in the inventory forms will automatically populate the A-90 form with the range of types, classes, and modes associated with the modes reported.



Miami-Dade County Department of Transportation and Public Works FTA Transit Asset Management

Timeline - State of Good Repair

Submittal dates are relative to your agency's fiscal year end.

If your fiscal year ends:	June 30	Sept 30	Dec 31
Share initial targets with planning partners		July 2017	
Report FY17 Asset Inventory Module (AIM) data to NTD Submit targets for FY18 to NTD (optional)	Oct	Jan	Apr
	2017	2018	2018
Complete compliant TAM Plan (1st required) Share TAM Plan with planning partners		Oct 2018	
Report FY18 AIM data to NTD (1st required) Submit targets for FY19 to NTD (1st required)	Oct	Jan	Apr
	2018	2019	2019
Report FY19 AIM data to NTD Submit targets for FY20 to NTD Submit narrative report to NTD (1st required)	Oct	Jan	Apr
	2019	2020	2020
Report FY20 AIM data to NTD Submit targets for FY21 to NTD Submit narrative report to NTD	Oct	Jan	Apr
	2020	2021	2021
Complete Updated TAM Plan Share TAM Plan with planning partners		Oct 2022	

Additional Key Activities:

- DTPW determined that 1/3 of Facilities will be assessed Annually
- Transportation Improvement Plan (TIP) is reported every five (5) years
- FTA Triennial review process is every three (3) years
- Investment Strategies is reported Annually

Frequently Asked Questions:

TAM/NTD Crosswalk

Assets	TAM Plan Inventory	TAM Plan Condition Assessment	NTD Inventory & Condition Submittal	SGR Targets
Revenue Vehicles				
Owned	yes	yes	yes	yes
Direct Capital Responsibility	yes	yes	yes	yes
3rd Party Owned (Direct Capital Responsibility)	yes	yes	yes	yes
3rd Party Owned (NO Direct Capital Responsibility)	yes	no	yes*	no
Equipment: Non-revenue Vehicles (regardless of cost)				
Owned	yes	yes	yes	yes
Direct Capital Responsibility	yes	yes	yes	yes
3 rd Party Owned	no	no	no	no
Equipment: Over \$50,000 in Acquisition Value				
Owned	yes	yes	no	no
Direct Capital Responsibility	yes	yes	no	no
3 rd Party Owned	no	no	no	no
Equipment				
Under \$50,000 in Acquisition Value	no	no	no	no
Facilities:				
Owned	yes	yes	yes	yes
Direct Capital Responsibility	yes	yes	yes	yes
3rd Party Owned (Direct Capital Responsibility)	yes	yes	yes	yes
3 rd Party Owned (NO Direct Capital Responsibility)	yes	no	yes**	no
Infrastructure: Non Rail Fixed Guideway				
Owned	yes	yes	no	no
Direct Capital Responsibility	yes	yes	no	no
3rd Party Owned (Direct Capital Responsibility)	yes	yes	no	no
3rd Party Owned (NO Direct Capital Responsibility)	yes	no	no	no
Infrastructure: Rail Fixed Guideway	,			
Owned	yes	yes	yes	yes
Direct Capital Responsibility	yes	yes	yes	yes
3rd Party Owned (Direct Capital Responsibility)	yes	yes	yes	yes
3 rd Party Owned (NO Direct Capital Responsibility)	yes	no	yes	no

Included in TAM Plan

Reported to NTD

Initial Completion Deadlines



*representative vehicles
**yes only for passenger facilities



Default Useful Life Benchmark (ULB) Cheat Sheet

Source: 2017 Asset Inventory Module Reporting Manual, Page 53

Transit Agencies will report the age of all vehicles to the National Transit Database. FTA will track the performance of revenue vehicles (Rolling Stock) and service vehicles (Equipment), by asset class, by calculating the percentage of vehicles that have met or exceeded the useful life benchmark (ULB).

FTA has set a default ULB as the expected service years for each vehicle class in the table below. ULB is the average age-based equivalent of a 2.5 rating on the FTA Transit Economic Requirements Model (TERM) scale. Transit agencies can adjust their Useful Life Benchmarks with approval from FTA.

		Default ULB
Vehicl	е Туре	(in years)
AB	Articulated bus	14
AG	Automated guideway vehicle	31
AO	Automobile	8
BR	Over-the-road bus	14
BU	Bus	14
CC	Cable car	112
CU	Cutaway bus	10
DB	Double decked bus	14
FB	Ferryboat	42
HR	Heavy rail passenger car	31
IP	Inclined plane vehicle	56
LR	Light rail vehicle	31
MB	Minibus	10
MO	Monorail vehicle	31
MV	Minivan	8
	Other rubber tire vehicles	14
RL	Commuter rail locomotive	39
RP	Commuter rail passenger coach	39
RS	Commuter rail self-propelled passenger car	39
RT	Rubber-tired vintage trolley	14
SB	School bus	14
	Steel wheel vehicles	25
SR	Streetcar	31
SV	Sport utility vehicle	8
ТВ	Trolleybus	13
TR	Aerial tramway	12
VN	Van	8
VT	Vintage trolley	58



Metrobus Fleet

Fleet status date:

10/1/2017

Current age report as of year:

9/30/2017

	LARGE BUS (40ft)					
Model Year	AVG. IN SERVICE DATE	AGE	QUANTITY	TOTAL YEARS		
1971	9/30/1971	46.0	1	46.0		
1980	11/14/1980	36.9	1	36.9		
1994	11/2/1994	22.93	1	22.9		
1998	3/15/1999	18.6	5	92.8		
1999	10/12/1999	18.0	64	1150.8		
2000	12/29/2000	16.8	84	1408.2		
2002	7/29/2002	15.2	101	1533.5		
2003	10/13/2003	14.0	100	1397.5		
2004	10/16/2004	13.0	109	1413.1		
2005	10/21/2005	12.0	108	1290.7		
2006	6/25/2006	11.3	76	856.8		
2009	8/22/2010	7.1	13	92.5		
2010	4/11/2011	6.5	5	32.4		
2014	2/9/2015	2.6	3	7.9		
2014	4/9/2015	2.5	32	79.3		
2015	2/5/2017	0.6	15	9.7		
2016	3/17/2017	0.5	5	2.7		
Total	•		723	9427.8		
Average A	ge (Large Bus)			13.04		

OVER-THE-ROAD					
Model Year	AVG. IN SERVICE DATE	AGE	QUANTITY	TOTAL YEARS	
2006	5/1/2006	11.4	12	137.1	
Total			12	137.1	
Over The F	Road (MCI)			11.42	

	ARTICULA [*]	TED B	US (60ft)	
2009	6/29/2010	7.3	25	181.5
2015	10/11/2015	2.0	43	84.8
2016	10/27/2016	0.9	11	10.2
2017	7/19/2017	0.2	10	10.2
Total 89 286.7				
Fleet Aver	age Age			3.22

	MINIBUS	and Cl	JTAWAY		
2001	7/18/2001	16.2	2	32.4	
2006	10/23/2007	9.9	72	716.1	
2009	4/23/2014	3.4	2	6.9	
2011	6/8/2012	5.3	3	15.9	
2017	7/30/2017	0.2	30	5.1	
Total	776.4				
Minibus Fl	Minibus Fleet Average Age				

OVER.	ATT.	
Total	933	10628.0
Fleet Average Age		11.4

DEFINITION

The cumulative years total revenue vehicles are in service divided by the sum of all revenue vehicles.

Calculations are based on average in-service date NOT model year.

NTD reporting is based on model year NOT average in-service date.

SGR Target includes all passenger-carrying vehicle except 3rd party owned with no direct capital responsibility

Metrorail Fleet

Fleet status date:

10/1/2017

Current age report as of year:

9/30/2017

	RA	IL CAR	. 5	
Model Year	AVG. IN SERVICE DATE	AGE	QUANTITY	TOTAL YEARS
1983	5/20/1984	33.4	38	1268.7
1983	12/9/1984	32.8	14	459.6
1983	2/4/1985	32.7	6	196.0
1983	4/13/1985	32.5	6	194.9
1983	5/15/1985	32.4	12	388.8
1983	6/17/1985	32.3	10	323.1
1983	7/26/1985	32.2	4	128.8
1983	8/24/1985	32.1	4	128.5
1983	9/19/1985	32.1	8	256.4
1983	10/21/1985	32.0	8	255.7
1983	11/13/1985	31.9	. 6	191.4
1983	12/22/1985	31.8	6	190.8
1983	1/19/1986	31.7	· 4	126.9
1983	2/6/1986	31.7	2	63.3
1983	4/19/1986	31.5	8	251.8
2017*	9/30/2017	0.0	6	0
Total			142	4424.8
Fleet Avera	age Age (Rail)			31.16

^{*} Vehicles have been received on property but are not in-service.

DEFINITION

The cumulative years total revenue vehicles are in service divided by the sum of all revenue vehicles.

Calculations are based on in-service date average NOT model year.

NTD reporting is based on model year NOT in-service date average.

Metromover Fleet

Fleet status date:

10/1/2017

Current age report as of year:

9/30/2017

MOVER VEHICLES					
Model Year	AVG. IN SERVICE DATE	AGE	QUANTITY	TOTAL YEARS	
1983	4/1/1985	32.5	2	65.0	
1993	8/5/1993	24.2	3	72.5	
1994	7/2/1994	23.3	14	325.7	
2007	9/28/2008	9.0	9	81.1	
2007	2/4/2009	8.7	2	17.3	
2010	8/14/2011	6.1	9	55.2	
2010	9/22/2012	5.0	9	45.2	
Total	662.1				
Fleet Avera	age Age (Move	r)		13.79	

DEFINITION

The cumulative years total revenue vehicles are in service divided by the sum of all revenue vehicles.

Calculations are based on in-service date average NOT model year.

NTD reporting is based on model year NOT in-service date average.

Non-Revenue (Service Vehicles) Fleet

Fleet status date:

10/1/2017

Current age report as of year:

9/30/2017

Model Year	AVG. IN SERVICE DATE	AGE	QUANTITY	TOTAL YEARS
1970	2/28/1970	47.6	1	47.6
1979	6/4/1979	38.4	1	38.4
1984	2/14/1984	33.6	1	33.6
1986	3/28/1986	31.5	1	31.5
1987	7/13/1987	30.2	1	30.2
1989	11/14/1990	28.1	2	56.2
1990	1/18/1990	27.7	1	27.7
1991	3/14/1992	26.1	4	104.4
1992	10/15/1992	25.1	3	75.3
1993	2/17/1996	24.1	2	48.2
1994	12/26/1994	22.8	2	45.6
1995	12/30/1995	22.1	4	88.4
1996	4/23/1997	21.1	3	63.3
1997	3/12/1998	20.1	3	60.3
1998	7/9/1998	19.3	4	77.1
1999	2/28/1999	18.7	6	112.0
2000	7/1/2000	17.3	2	34.5
2001	2/24/2001	16.7	9	150.0
2002	9/10/2002	15.1	11	166.0
2003	6/15/2003	14.3	26	372.9
2004	10/14/2004	13.1	11	144.0
2005	11/26/2005	12.3	5	61.7
2006	10/22/2012	11.1	20	221.8
2007	1/4/2010	10.1	23	232.0
2008	3/31/2009	9.1	1	9.1
2009	9/30/2009	8.0	4	32.0
2011	1/9/2012	6.1	4	24.3
2014	12/8/2014	2.8	4	11.3
Total Fleet Aver	age Age (Truck	s)	159	2399.4 15.09

		LWHE	1	
Model Year	AVG. IN SERVICE DATE	AGE	QUANTITY	TOTAL YEARS
1983	8/6/1993	24.2	3	72.5
1986	10/28/1986	30.9	1	30.9
1991	12/20/1991	25.8	1	25.8
1996	8/2/1996	21.2	1	21.2
2002	6/30/2002	15.3	1	15.3
Total			. 7	165.7
Fleet Avera	23.67			

	TAUR	enviora	le Francis	
1999	9/30/2013	18.8	3	56.3
2000	4/13/2000	17.5	1	17.5
2001	8/9/2001	16.2	3	48.5
2002	8/20/2002	15.2	10	151.8
2003	11/5/2003	13.9	1	13.9
2004	11/27/2004	12.9	10	129.2
2007	7/30/2009	10.1	13	130.7
2015	2/12/2016	2.7	56	153.9
2016	5/12/2017	0.4	6	2.3
Total	704.1			
Fleet Avera	age Age (Cars)			6.84

Total	269	3269.2
Fleet Average Age (ALL)		12.15

DEFINITION

Fleet average age calculations are based on Model Year not Average In-Service Date. Useful Life Benchmark is based on the FTA defaulted values.