

# **Annual Review of MTA Sponsored Pension & Retirement Funds**

**As of December 31, 2016**



**Report to the MTA Finance Committee  
May 2017**

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# Executive Summary

## **MTA Sponsored Pension Plans on solid footing**

- Complex Plans that are conservatively administered (i.e. ADC, Return Assumption, Amortization)
- MTA Defined Benefit Plan: \$3.4 billion, 68.6% Funded
- LIRR Additional Plan: \$675 million, 46.0% Funded
- MaBSTOA: \$2.5 billion, 67.3% Funded
- Combined pension plans assets under management grew 9.1% year over year
- OPEB Trust: \$323 million

## **Strong performance for 2016**

- MTA Defined Benefit Plan, LIRR Additional Plan returned +7.75% (net)
- MaBSTOA returned +8.25% (net)
- All exceeded assumed rate of return (+7%), market benchmark (+5.9%), public plan peer group (+7.1%) for 2017
- OPEB Trust returned +8.60% (net)
- Performance driven by asset allocation and investment selection
- Portfolio remains conservatively managed, with 33% less volatility and risk than market benchmark

## **MTA Deferred Compensation Plan (401k/457)**

- Ended year at \$5.3 billion in assets and 49,500 active participants
- Year over year assets under management grew 9.8%
- Participation rate (~67%) amongst highest in public plan peer group
- Plan design and investment lineup continually developed to enhance participant experience



# Overview – MTA Sponsored and Multi-Employer Plans

Pension Plan	# of Active Members <sup>3</sup>	2016 Pension Contributions - Actual (\$ mm)	2017 Pension Cost - Adopted Budget (\$ mm) <sup>1,2</sup>	Assets (as of 12/31/16)
<b>MTA Sponsored Defined Benefit Plans</b>				
MTA DB Plan	17,670	\$281	\$300	\$3,415,206,931
MaBSTOA	8,515	221	208	2,504,365,143
LIRR Additional Plan <sup>5</sup>	216	151	227	675,624,994
<b>Total</b>	<b>26,401</b>	<b>\$653</b>	<b>\$735</b>	<b>\$6,595,197,068</b>
<b>MTA Sponsored Defined Contribution Plans</b>				
MTA Deferred Compensation Program (401k & 457)	49,456	\$4	\$4	\$5,333,954,327
MNR 401(k)	551	3	3	
TCU/HQ 401(k)	168	<1	<1	
<b>Total</b>	<b>49,456</b>	<b>\$4</b>	<b>\$4</b>	<b>\$5,333,954,327</b>
<b>Other Multi Employer Plans</b>				
NYCERS	39,417	\$798	\$831	
NYSLRS	1,049	13	17	
Voluntary Defined Contribution (Tier 6 option)	72	<1	<1	
Railroad Retirement Board (RRB, Tier II expense only) <sup>4</sup>	N/A	144	155	
<b>Total</b>	<b>N/A</b>	<b>\$956</b>	<b>\$1,004</b>	
<b>Total Pension &amp; Retirement Contributions / Expenses</b>		<b>\$1,613</b>	<b>\$1,743</b>	

Notes:

- 1) The Budget figures are per the 2017 February Financial Plan (February Financial Plan 2017-2020)
- 2) Financial Plan estimates may differ from the Actuarial Certification since Agencies may anticipate hires, terminations and transfers. These changes could occur after the date used by the Actuary to determine the valuation results.
- 3) Number of active members are based on the latest actuarial valuations.
- 4) MNR and LIRR employees are in RRB. MNR employees are participants in either the MTADBPP or the MNR 401 (k) Plan. LIRR employees are enrolled in the MTADBPP with a small closed group in the LIRR Additional Plan.
- 5) Participants in the LIRR Additional Plan also receive part of their retiree benefit from the MTADBPP and are reflected in the MTADBPP as well. 2016 Contribution includes \$81 million ADC and \$70 million catch-up contribution. 2017 Budget includes an ADC of \$82 million and a catch-up contribution of \$145 million.

Source: MTA



# Market Overview & Outlook

## Equity Markets continued to perform well

- Global equity markets continued to push higher, driven largely by technical, rather than fundamental, factors
- US was best performing major developed market in 2016, with S&P 500 returning +12.0% and Russell 2000 returning +21.3
- International markets were weaker, with MSCI EAFE (+1%) weighed down by performance in Europe and Japan
- Emerging markets remained volatile, with the MSCI EM Index returning 11.5% for the year

## Fixed Income was mixed for the year

- Risky assets outperformed safe assets
- US markets were positive for the year, but negative in the 4<sup>th</sup> quarter
- In the US, the Aggregate Bond Index returned 2.6% with Investment Grade Credit outperforming Treasuries and Mortgages
- High Yield rebounded from a weak 2015 on the recovery in the energy sector, returning 17.1%
- Returns were exceedingly volatile in global fixed income markets due to strengthening US Dollar and US rate hike
- Rates on government debt outside the US were negative for substantial portions of German, Swiss, and Japanese markets

## Outlook for 2017

- Remain cautious in deploying capital. Emphasize downside protection and cash/income generation
- Current valuations are high and volatility is low across most asset classes. Tail risk generally ignored due to central bank put
- Current market has been supported by liquidity from central banks and substantial leverage in system
- Divergence of central bank policies will drive macro picture. US tightening (rates, dollar) versus accommodation in EU & Japan
- International regime shift from cooperation and coordination to competition and confrontation
- Active management should capitalize on increasing volatility and dispersion



## MTA Sponsored Plans – Asset Allocation

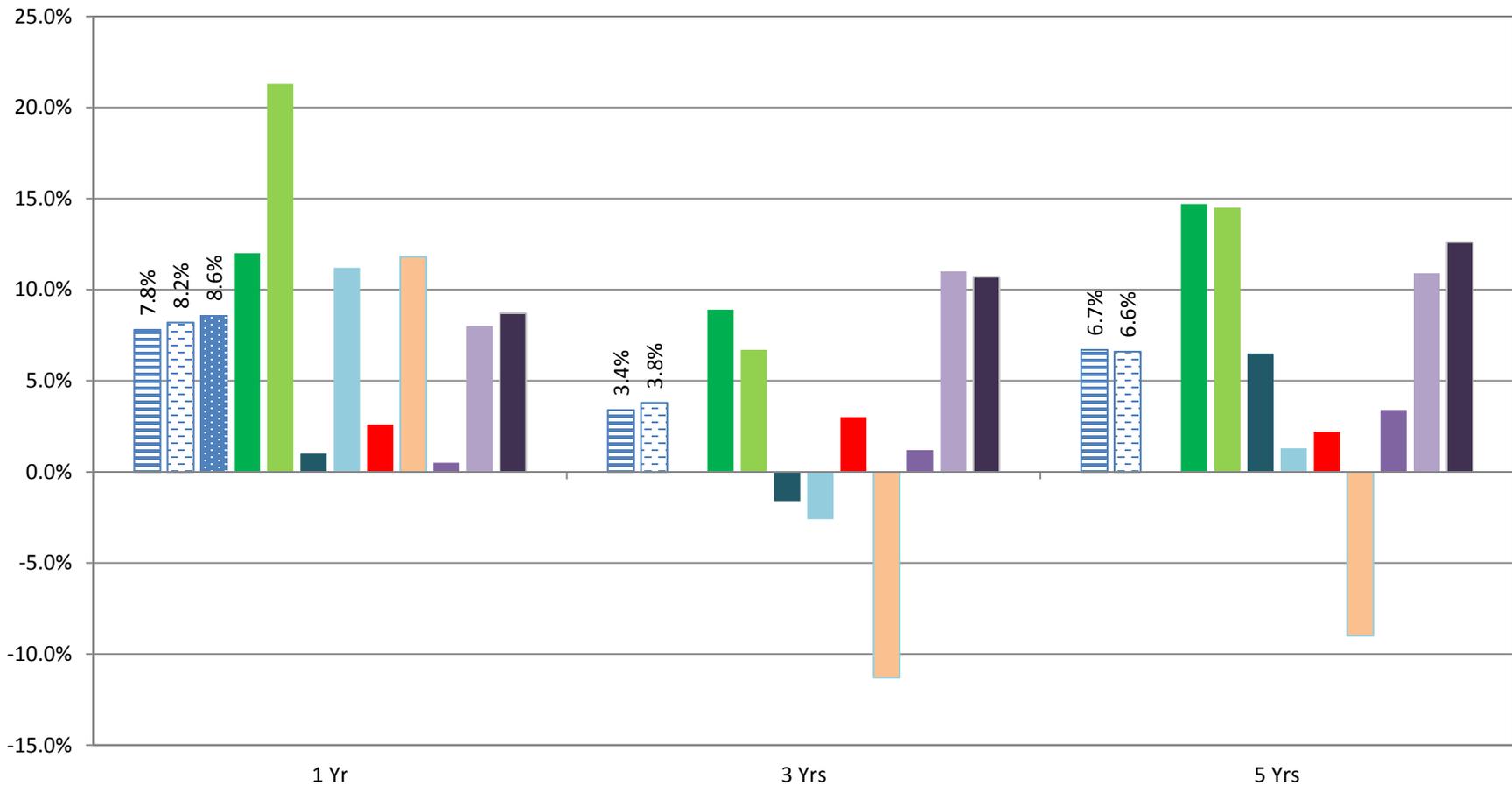
	MTA DB & MaBSTOA Target Allocation	MTA DB Actual	MaBSTOA Actual	MTA OPEB Target Allocation	MTA OPEB Actual
<b>Equities</b>	30.0%	28.8%	28.9%	35.0%	36.3%
<i>Domestic Equity</i>	15.0%	14.7%	14.6%		
<i>Large Cap</i>	10.0%	9.4%	9.2%		
<i>Small Cap</i>	5.0%	5.3%	5.4%		
<i>International Equity</i>	15.0%	14.1%	14.3%		
<i>Developed Markets</i>	12.0%	11.2%	11.2%		
<i>Emerging Markets</i>	3.0%	2.9%	3.1%		
<b>Fixed Income</b>	16.0%	15.8%	14.6%	18.0%	17.5%
<b>Global Asset Allocation*</b>	17.0%	15.3%	16.0%	30.0%	29.0%
<b>Absolute Return</b>	15.0%	14.2%	14.8%	12.0%	9.9%
<b>Real Assets</b>	4.0%	4.4%	3.9%	5.0%	4.5%
<b>Real Estate</b>	5.0%	5.3%	4.9%		
<b>Opportunistic</b>	6.0%	9.6%	10.0%		
<b>Private Equity</b>	7.0%	4.1%	4.3%		
<b>Cash**</b>	0.0%	2.5%	2.6%	0.0%	2.8%



\* Global Asset Allocation Managers may invest across various liquid asset classes including stocks, bonds and commodities

\*\* MTA DB and MaBSTOA utilize an overlay manager (Parametric Clifton) in an effort to ensure that cash remains invested

# MTA Sponsored Plans – Returns vs Indices

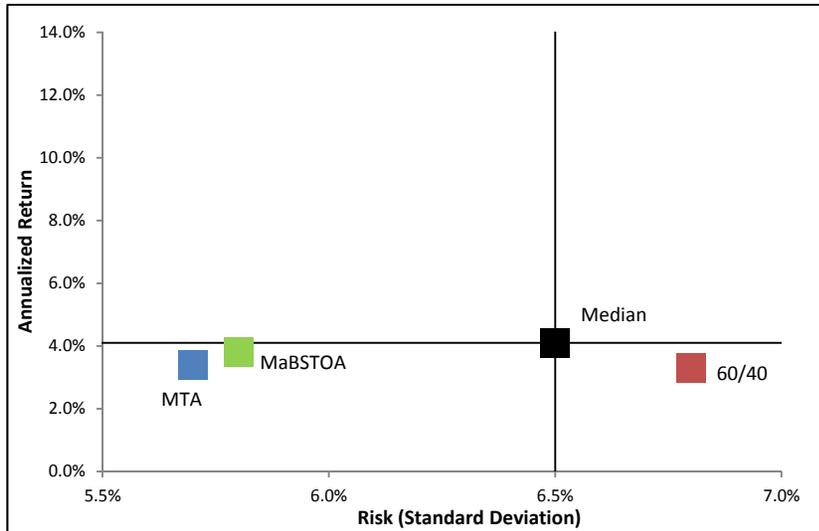


- MTA DB
- MaBSTOA
- MTA OPEB
- S&P 500
- Russell 2000
- MSCI EAFE
- MSCI Emerging Mkts
- Barclays Aggregate Bond Index
- Blommborg Commodity Index
- HFRI Fund Weighted Composite Index
- NCREIF Property Index
- Private Equity Benchmark

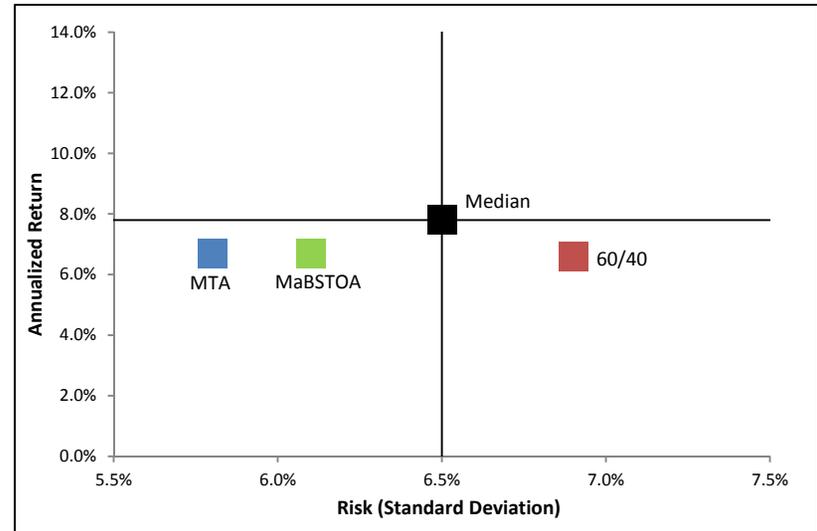


# MTA Sponsored Plans – Historical Performance

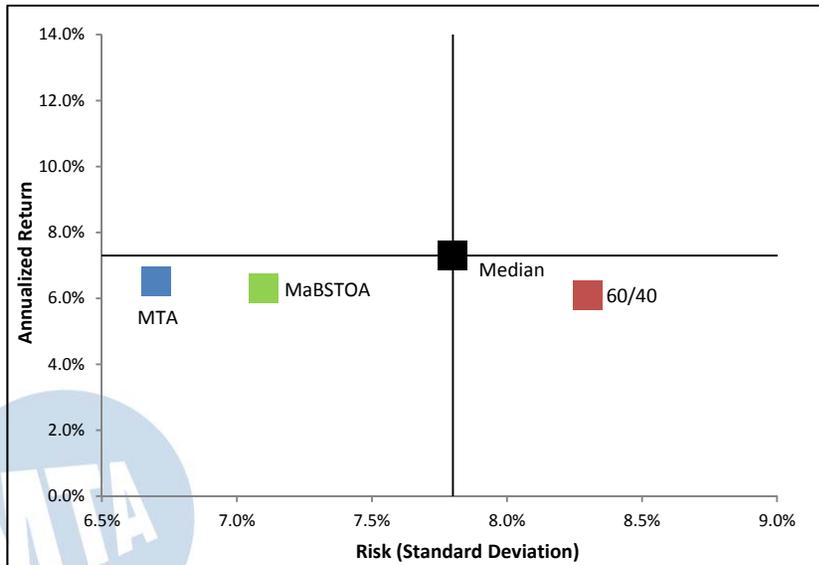
### 3 Year Risk-Return Chart



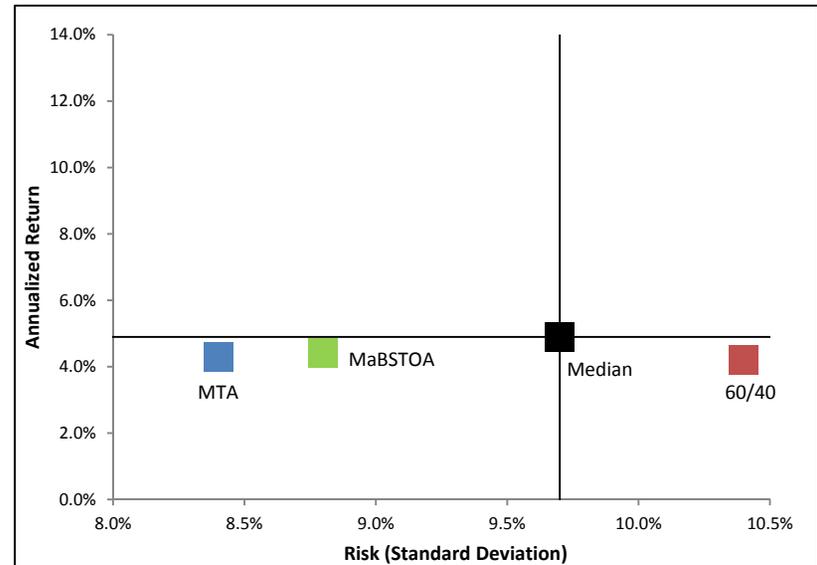
### 5 Year Risk-Return Chart



### 7 Year Risk-Return Chart



### 10 Year Risk-Return Chart



Note: Returns are Net of fees and periods are ending 12/31/16

Note: 60/40 represents 60% Equities (MSCI ACWI) and 40% Fixed Income (BC Agg)

# MTA Sponsored Plans – Investment Rate Return Assumptions

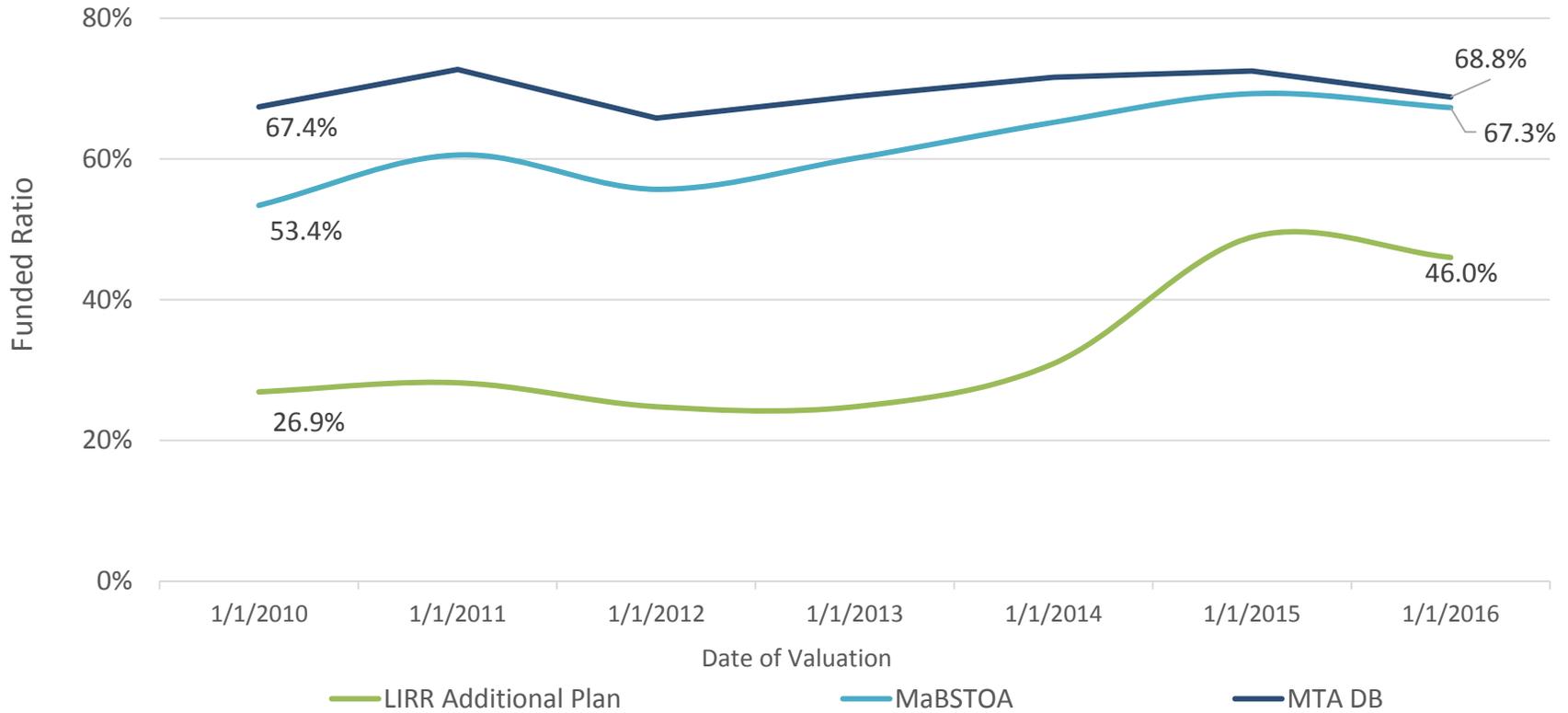
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	<b>Investment Rate (net of fees)</b>				
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Pension Plan</b>					
<b>MTA DB Plan</b>	8.00%	7.50%	7.00%	7.00%	7.00%
<b>LIRR - Additional Plan</b>	8.00%	7.50%	7.00%	7.00%	7.00%
<b>MaBSTOA</b>	8.00%	7.50%	7.00%	7.00%	7.00%
<b>NYSLRS</b>				7.50%	7.50%
<b>NYCERS</b>				7.00%	7.00%

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# MTA Sponsored Plans – Funding Status



Source: Milliman USA



# MTA Sponsored Plans – MWBE Participation

As of December 31, 2016

## Combined MTA Defined Benefit and MaBSTOA Plans

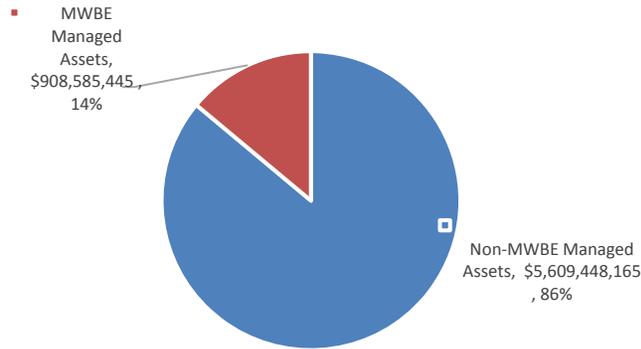
- Total assets managed by MWBEs: \$908.6 million; or 14% of total assets
- Majority of assets are in traditional asset classes
- Traditional assets managed by MWBEs: \$843.7 million; or 20% of traditional assets
  - MWBE firms manage
    - 51% of US Equities
    - 25% of Non-US Equities
    - 9% of Fixed Income
- First MWBE investment in alternative investments made in 3<sup>rd</sup> quarter
  - Currently 18.9% of Real Estate Allocation;
  - Target allocation of 20% to asset class; 1% of total assets
- Continue to actively source new relationships and investment managers
  - Engaged with investment consultants, industry groups, custodians, and brokers
  - Key opportunities in 2017 will be in US Small Cap, Long/Short Equities, Global Macro, Emerging Markets, and High Yield Credit



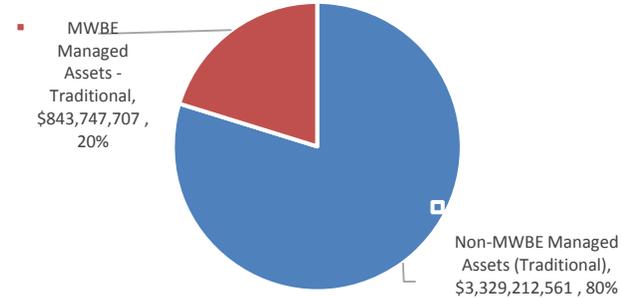
# MTA Sponsored Plans – MWBE Participation

As of December 31, 2016

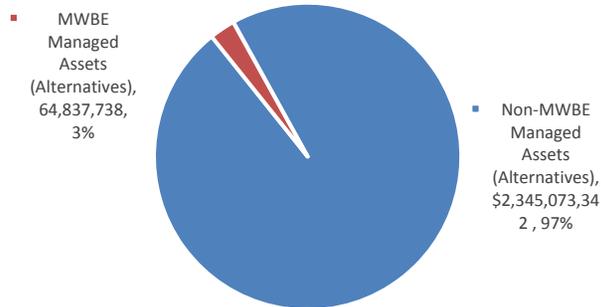
Combined Plans - Total Assets



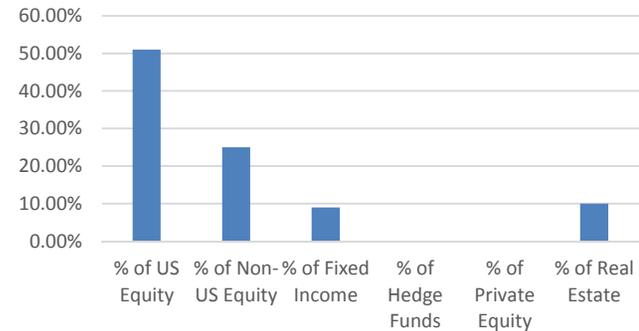
Combined Plans - Traditional Investments



Combined Plans- Alternative Investments



MWBE Managed Assets by Asset Class



Traditional Equities- Changes to allocations and manager exposure in asset class led to an increase in 2016 in MWBE managed assets. One new MWBE manager added and one firm gained MWBE status in 2016.

Fixed Traditional Income - MWBE exposure has fallen in recent years as one investment manager closed its firm, one lost MWBE status, and both were replaced by index investments.

Hedge Funds - Actively searching the universe for both established and emerging hedge funds managed by minorities and women. Meetings with 43 MWBE hedge funds have taken place in 2016, with a focus on global macro and long/short equity strategies.

Private Equity - Actively searching the private equity universe. Unable to reach terms with one approved MWBE private equity firm. New investment made in fund managed entirely by MWBE staff (firm is not MWBE). Expectations for more funds in market in 2017 and 2018.

Real Estate - Currently staging into MWBE managed real estate investment, representing 1% of plan assets and 20% of real estate allocation. Investment should be funded by middle of 4Q16



# Appendix



# MTA Sponsored Retirement Plans

## MTA Defined Benefit Pension Plan LIRR Plan for Additional Plan Pension Board of Managers

### MEMBER

Chairman of the MTA

MTA Labor Relations

MTA Chief Financial Officer

Metro North

Long Island Railroad

SIRTOA

MTA Bus

Long Island Bus

TWU Representative

### DESIGNEE

Margaret Connor

Chair of Pension Board of Managers

Abigail Sole

Douglas Johnson

Kim Porcelain

Michael Reilly

Kevin McKenna

Roy Grey-Stewart

Patrick McCoy

John Day

### MTA TITLE

Sr. Dir. of Human Resources and Retirement Programs

Labor Counsel

Director of Management & Budget

VP, Finance Adm & Info Tech

Controller, LIRR

MTA Retiree

Director of Finance, MTA Bus

Director, MTA Finance

MTA Chief Investment Officer

Investment Advisor

Actuary

Trustee

Sean Crawford

NEPC, LLC

Milliman, USA

J P Morgan Chase



# MTA Sponsored Retirement Plans

## MaBSTOA Pension Plan Investment Committee

### MEMBER

Chairman of Employer's (MaBSTOA) Board  
MTA Chief Financial Officer  
President of Transit Authority  
TWU Local 100 (2 representatives)

### DESIGNEE

Margaret Connor  
Kevin McKenna  
William Vazoulas  
James Whalen  
Richard Davis

### MTA TITLE

Sr. Dir. of Human Resources and  
Retirement Programs  
MTA Retiree  
Controller, NYCT

MTA Chief Investment Officer  
Investment Advisor  
Actuary  
Trustee

Sean Crawford  
NEPC, LLC  
Milliman, USA  
J P Morgan Chase



# MTA Sponsored Retirement Plans

## MTA Deferred Compensation Programs (401 K and 457) Deferred Compensation Committee

<u>MEMBER</u>	<u>DESIGNEE</u>	<u>MTA TITLE</u>
Chairman of the MTA	Margaret Connor, Chair	Sr. Dir. of Human Resources and Retirement Programs
MTA Labor Relations	Abigail Sole	Labor Counsel
MTA Chief Financial Officer	Frances Chou	Assistant Director, MTA Budget
NYCT, President	James Masella	AVP, NYCT Employee Benefits
TBTA, President	Olga Chernat	Deputy Director, MTA Finance
Metro North	James McGovern	Controller, MNR
Long Island Railroad	Michael Reilly	Controller, LIRR
MTA Bus	Roy Grey-Stewart	Director of Finance, MTA Bus
	MTA Chief Investment Officer	Sean Crawford
	Investment Advisor	Mercer
	Recordkeeper	Prudential



# MTA Sponsored Retirement Plans

## MTA Retiree Welfare Benefits Plan (OPEB) Board of Managers

### MEMBER

Chairman of the MTA  
MTA Chief Financial Officer  
MTA Labor Relations

### DESIGNEE

Robert Foran, Chair of OPEB  
Josiane Codio  
Margaret Connor

### MTA TITLE

Chief Financial Officer  
Director, MTA Treasury  
Sr. Dir. of Human Resources and  
Retirement Programs

MTA Chief Investment Officer  
Investment Advisor  
Actuary  
Trustee

Sean Crawford  
NEPC, LLC  
Milliman, USA  
J P Morgan Chase



# MTA Defined Benefit Plan – Investment Managers

Asset Class	Investment Manager	Asset Class	Investment Manager
Large Cap Equity	Independent Franchise Partners* Lazard Rhumbline*	Opportunistic Investments	Carlyle Crescent Entrust Gramercy MC Seamax Orchard Landmark Park Square Perella Weinberg PIMCO
Small Cap Equity	Atlanta Capital Earnest Partners*		
International Equity	Blackrock Johnston* Sanderson		
Emerging Market Equity	Eaton Vance Lazard	Global Asset Allocation	Bridgewater Mellon PIMCO Wellington
Fixed Income	Advent* Baird GAM SSgA Vanguard Wellington	Private Equity	AEA Apollo Brookfield Crescent Gamut Goldman Sachs JFL Equity Partners Lexington Lightyear Capital Newbury Equity Partners Pantheon
Absolute Return	Allianz BeaconLight Bridgewater Canyon LibreMax Makuria Passport Senator	Real Estate	JP Morgan Real Estate Siguler Guff
Real Assets	Arclight EIG NGP Wellington	Overlay	Clifton Parametric
		Cash	Williams Capital* JP Morgan

\*MWBE Investment Manager



# MaBSTOA Defined Benefit Plan – Investment Managers

Asset Class	Investment Manager	Asset Class	Investment Manager
Large Cap Equity	Independent Franchise Partners*	Opportunistic Investments	Carlyle
	Lazard		Crescent
Small Cap Equity	Rhumblin*	Global Asset Allocation	Entrust
	Times Square		Gramercy
International Equity	Pzena	Private Equity	MC Seamax
	Blackrock		Orchard Landmark
Emerging Market Equity	Johnston*	Real Estate	Park Square
	Sanderson		Perella Weinberg
Fixed Income	Eaton Vance	Cash	PIMCO
	Lazard		Wellington
Absolute Return	Advent*	Overlay	AEA
	Baird		Apollo
Real Assets	GAM	Cash	Brookfield
	SSgA		Crescent
Real Assets	Vanguard	Cash	Gamut
	Wellington		Goldman Sachs
Real Assets	Allianz	Cash	JFL Equity Partners
	BeaconLight		Lexington
Real Assets	Bridgewater	Cash	Lightyear Capital
	Canyon		Newbury Equity Partners
Real Assets	LibreMax	Cash	Pantheon
	Makuria		JP Morgan Real Estate
Real Assets	Passport	Cash	Siguler Guff
	Senator		UBS
Real Assets	Arclight	Cash	Clifton Parametric
	EIG		Williams Capital*
Real Assets	NGP	Cash	JP Morgan
	Wellington		

\*MWBE Investment Manager



# MTA OPEB– Investment Managers

<b>Asset Class</b>	<b>Investment Manager</b>	<b>Asset Class</b>	<b>Investment Manager</b>
<b>Global Equity</b>	Artisan Hexavest Walter Scott	<b>Global Asset Allocation</b>	Bridgewater PIMCO Wellington
<b>Fixed Income</b>	Baird GAM Wellington	<b>Absolute Return</b>	Allianz Bridgewater
		<b>Real Assets</b>	Wellington



# MTA Defined Contribution Plan – Investment Managers

Asset Class	Investment Manager		Asset Allocation Funds
	Active	Passive	
Stable Value	Galliard		MTA Income
			MTA 2015
Fixed Income	Loomis Sayles	SSgA	MTA 2020
	TCW		MTA 2025
	Wellington		MTA 2030
			MTA 2035
Large Cap Equity	T Rowe Price	Vanguard	MTA 2040
	Jennison		MTA 2045
Mid Cap Equity	Vanguard	SSgA	MTA 2050
	Frontier		MTA 2055
Small Cap Equity	Denver	SSgA	
	Conestoga		
International Equity	William Blair	SSgA	
	Mondrian		

