

PENSION FUND TRUSTEES MEETING AGENDA

November 19, 2019

5:00 P.M. – 1201 S. Washington Ave. Lansing, MI – REO Town Depot Board of Water & Light Headquarters

Call to Order

Roll Call

Public Comments on Agenda Items

1. Pension Fund Trustees Meeting Minutes of 11/13/18	. TAB 1
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4. Pension Dashboard	. TAB 4
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 Supplemental Informationa. Resolution – Accept Audited Plan Financial Statements (FY 2019) 	

Other

Adjourn

LANSING BOARD OF WATER & LIGHT PENSION FUND TRUSTEES MEETING November 13, 2018

The Pension Fund Trustees of the Lansing Board of Water & Light (BWL) met at the BWL Headquarters – REO Town Depot located at 1201 S. Washington Ave., Lansing, MI, at 6:07 P.M. (Officially Publicly Noticed for 5:35 P.M.) on Tuesday, November 13, 2018.

Chairperson David Price called the meeting to order at 6:07 p.m. and asked the Corporate Secretary to call the roll.

Present: Trustees Beth Graham, Anthony McCloud, Tony Mullen, David Price, Ken Ross, Tracy Thomas, and Sandra Zerkle.

Absent: None and a quorum was declared.

Public Comments

None.

Approval of Minutes

Motion by Trustee Mullen and Seconded by Trustee Graham to approve the minutes from the November 14, 2017 Pension Fund Trustees' Annual Meeting.

Action: Motion Carried

Defined Benefit Plan Information

RESOLUTION 2018-11-06 <u>Revised Lansing Board of Water & Light Defined Benefit Plan</u> <u>for Employees' Pensions Statement of Investment Policies,</u> <u>Procedures and Objectives</u>

WHEREAS, the Board of Water and Light (the "Sponsor") sponsors the Lansing Board of Water & Light Defined Benefit Plan for Employees' Pensions (the "Defined Benefit Plan"); and

WHEREAS, the Retirement Plan Committee has reviewed the current Lansing Board of Water & Light Defined Benefit Plan for Employees' Pensions Statement of Investment Policies, Procedures and Objectives in conjunction with a transition to a new benefit plan investment consultant; and

WHEREAS, the Retirement Plan Committee recommended the Sponsor adopt the revisions reflected in the attached Lansing Board of Water & Light Defined Benefit Plan for Employees' Pensions Statement of Investment Policies, Procedures and Objectives; and

WHEREAS, the Sponsor adopted the attached, revised Defined Benefit Plan for Employees' Pensions Statement of Investment Policies, Procedures and Objectives;

THEREFORE, it is:

RESOLVED, that the Trustees acknowledge the attached, revised Defined Benefit Plan for Employees' Pensions Statement of Investment Policies, Procedures and Objectives

Motion by Trustee Mullen, Seconded by Trustee Graham to acknowledge the Revised DB Investment Policy Statement.

Action: Motion Carried

Post-Employment Benefit Plan Information

RESOLUTION 2018-11-07 <u>Revised Post-Retirement Benefit Plan for Eligible Employees of</u> <u>Lansing Board of Water & Light Statement of Investment Policies,</u> <u>Procedures, and Objectives</u>

WHEREAS, the Board of Water and Light (the "Sponsor") sponsors the VEBA (Post-Retirement Benefit Plan for Eligible Employees of Lansing Board of Water & Light); and

WHEREAS, the Retirement Plan Committee has reviewed the current VEBA Statement of Investment Policies, Procedures and Objectives, in conjunction with a transition to a new benefit plan investment consultant; and

WHEREAS, the Retirement Plan Committee recommended the Sponsor adopt the revisions reflected in the attached VEBA Statement of Investment Policies, Procedures and Objectives; and

WHEREAS, the Sponsor adopted the attached, revised VEBA Statement of Investment Policies, Procedures and Objectives;

THEREFORE, it is:

RESOLVED, that the Trustees acknowledge the attached, revised VEBA Statement of Investment Policies, Procedures and Objectives.

Motion by Trustee Zerkle, Seconded by Trustee Graham, to acknowledge the Revised Post-Retirement Benefit Plan for Eligible Employees of Lansing Board of Water & Light of Investment Statement of Investment Policies, Procedures and Objectives.

Action: Motion Carried

Defined Contribution Plan Information

RESOLUTION 2018-11-08 Amendment of Defined Contribution Plan Number 106696; Delegation of Investment Authority

WHEREAS, the individual voting members of the Board of Commissioners for the Lansing Board of Water and Light serve as the trustees (collectively, the "Trustees") of the ICMA Retirement

Corporation Governmental Money Purchase Plan & Trust (the "Defined Contribution Plan Number 106696"); and

WHEREAS, the Trustees and the Lansing Board of Water and Light want to amend Defined Contribution Plan Number 106696 for the purpose of enabling the Trustees to delegate certain investment authority to the Retirement Plan Committee (the "Committee") of Defined Contribution Plan Number 106696, and for the purpose of changing the name of Defined Contribution Plan Number 106696.

THEREFORE, it is:

RESOLVED, that the Trustees consent to the adoption of Addendum Number 1 to Defined Contribution Plan Number 106696 effective as indicated therein.

FURTHER RESOLVED, that, after reviewing the attached Lansing Board of Water and Light Defined Contribution Plan and Trust 1 Statement of Investment Policies, Procedures and Objectives (the "IPS"), the Trustees acknowledge said IPS, effective as indicated therein.

FURTHER RESOLVED, that the Trustees delegate to said Committee authority to perform the investment functions that are assigned to the Committee in the IPS, a copy of which is attached hereto and incorporated herein by reference. The delegation of said authority shall be effective as set forth in the IPS.

FURTHER RESOLVED, that the Trustees indemnify and hold harmless each member of the Committee from and against all liability of any kind, including, without limitation, court costs, attorneys' fees and other expenses that arise from any legal or administrative proceeding of any kind that is brought by any person, entity or government agency in connection with the Committee's discharge of its duties that are described in the attached IPS; provided, however, that this indemnification shall not apply with regard to any proceeding in which a Committee member is found to have been grossly negligent or to have violated a law or committed a crime.

Motion by Trustee Zerkle, Seconded by Trustee Graham to acknowledge the Resolution for amendment of Defined Contribution Plan Number 106696 by Board adoption of Addendum; Acknowledgment of IPS; Delegation of Authority; and Indemnification.

Action: Motion Carried

RESOLUTION 2018-11-09 Amendment of Defined Contribution Plan Number 108824; Delegation of Investment Authority

WHEREAS, the individual voting members of the Board of Commissioners for the Lansing Board of Water and Light serve as the trustees (collectively, the "Trustees") of the ICMA Retirement Corporation Governmental Money Purchase Plan & Trust Number 108824 (the "Defined Contribution Plan Number 108824"); and WHEREAS, the Trustees and the Lansing Board of Water and Light want to amend Defined Contribution Plan Number 108824 for the purpose of enabling the Trustees to delegate certain investment authority to the Retirement Plan Committee (the "Committee") of Defined Contribution Plan Number 108824, and for the purpose of changing the name of Defined Contribution Plan Number 108824.

THEREFORE, it is:

RESOLVED, that the Trustees consent to the adoption of Addendum Number 1 to Defined Contribution Plan Number 108824 effective as indicated therein.

FURTHER RESOLVED, that, after reviewing the attached Lansing Board of Water and Light Defined Contribution Plan and Trust 2 Statement of Investment Policies, Procedures and Objectives (the "IPS"), the Trustees acknowledge said IPS, effective as indicated therein.

FURTHER RESOLVED, that the Trustees delegate to said Committee authority to perform the investment functions that are assigned to the Committee in the IPS, a copy of which is attached hereto and incorporated herein by reference. The delegation of said authority shall be effective as set forth in the IPS.

FURTHER RESOLVED, that the Trustees indemnify and hold harmless each member of the Committee from and against all liability of any kind, including, without limitation, court costs, attorneys' fees and other expenses that arise from any legal or administrative proceeding of any kind that is brought by any person, entity or government agency in connection with the Committee's discharge of its duties that are described in the attached IPS; provided, however, that this indemnification shall not apply with regard to any proceeding in which a Committee member is found to have been grossly negligent or to have violated a law or committed a crime.

Motion by Trustee Zerkle, Seconded by Trustee Graham to acknowledge the Resolution for amendment of Defined Contribution Plan Number 108824 by Board adoption of Addendum; Acknowledgment of IPS; Delegation of Authority; and Indemnification.

Action: Motion Carried

RESOLUTION 2018-11-10

Amendment of Lansing Board of Water & Light 457 Deferred Compensation Plan; Acknowledgement of IPS; Delegation of Investment Authority; Indemnification

WHEREAS, the individual voting members of the Board of Commissioners for the Lansing Board of Water and Light serve as the trustees (collectively, the "Trustees") of the ICMA Retirement Corporation 457 Governmental Deferred Compensation Plan and Trust Number 300435 (the "457 Plan"); and

WHEREAS, the Trustees and the Lansing Board of Water and Light want to amend the 457 Plan for the purpose of enabling the Trustees to delegate certain investment authority to the Retirement Plan Committee (the "Committee") of the 457 Plan Trust, and for the purpose of changing the name of the 457 Plan.

THEREFORE, it is:

RESOLVED, that the Trustees consent to the adoption of Addendum Number 1 to the 457 Plan effective as indicated therein.

FURTHER RESOLVED, that, after reviewing the attached Lansing Board of Water and Light 457 Deferred Compensation Plan and Trust Statement of Investment Policies, Procedures and Objectives (the "IPS"), the Trustees acknowledge said IPS, effective as indicated therein.

FURTHER RESOLVED, that the Trustees delegate to said Committee authority to perform the investment functions that are assigned to the Committee in the IPS, a copy of which is attached hereto and incorporated herein by reference. The delegation of said authority shall be effective as set forth in the IPS.

FURTHER RESOLVED, that the Trustees indemnify and hold harmless each member of the Committee from and against all liability of any kind, including, without limitation, court costs, attorneys' fees and other expenses that arise from any legal or administrative proceeding of any kind that is brought by any person, entity or government agency in connection with the Committee's discharge of its duties that are described in the attached IPS; provided, however, that this indemnification shall not apply with regard to any proceeding in which a Committee member is found to have been grossly negligent or to have violated a law or committed a crime.

Motion by Trustee Zerkle, Seconded by Trustee Graham, to acknowledge the Resolution for amendment of the 457 Plan by Board adoption of Addendum; Acknowledgment of IPS; Delegation of Investment Authority; and Indemnification.

Action: Motion Carried

Supplemental Information

Chief Financial Officer Heather Shawa introduced George Tarlas, Senior Managing Director with ACG Asset Consulting Group, who presides over the DB and VEBA plan advisors and provided a market overview of the DB and VEBA plans; Sandra Rouse-Thames, Retirement Plan Specialist and Lisa Burks-Wilson, Director of Relationship Management from ICMA-the DC Plan administrator, who provided a participant education review from ICMA; and Steven Gibson, Senior Consultant with Plante Moran-the DC Plan advisors. Ms. Shawa also acknowledged, Finance Manager Scott Taylor, Finance Supervisor David Houser, and Financial Analyst Kyle Page for their work on the Trustee packet and audit overview.

Trustee Ross asked if the cumulative return value was from the start date to present, and for an explanation of the index in the narrative that is comparable to the investment style. Ms. Shawa responded that the cumulative return was from the start date to the present, and Mr. Tarlas responded that large cap growth stocks are selected and the benchmark is the Russell 1000 growth index which has a growth and value style. Trustee Ross also asked whether BWL has evaluated whether it made more sense to do index investing to save fees as some of the stock selections have beat the index and others have not. Ms. Shawa responded BWL is working with ACG Consulting and they will be examining the different options throughout the next year.

Trustee Ross thanked Ms. Shawa for the dashboard and the amount of information provided.

Trustee Zerkle commended the Board and the ICMA representatives for the retirement program provided to the employees.

Trustee Thomas thanked the ICMA representatives for their excitement, motivation, and enthusiasm.

Trustee Ross asked for an explanation of the asset allocation for the plans and the side by side comparison between employees and other participants. Ms. Shawa responded that the participants are more educated when it pertains to their personal investment strategies. Ms. Rouse-Thames also responded that a lot of employees select the managed accounts tool where Morningstar makes the decision for them for a small fee. Trustee Ross also inquired as to why the asset allocation totaled more than 100 percent for the 401(a) plans. Ms. Rouse-Thames responded that they will look into that and provide the information to the Trustees.

Trustee Zerkle asked if there were guidelines for loans that employees take out of the 401(a) plans. Ms. Shawa responded that the 457(b) plan allows an emergency withdrawal but the 401(a) plan follows the IRS guidelines and there are no recommendations at this time for any changes.

Trustee Ross asked if employees are auto enrolled when they are hired, if there are automatic annual percentage increases. and if a percentage increase program had been evaluated if there wasn't one. Ms. Shawa responded that employees are not automatically enrolled and a percentage increase program is not in the system. Mr. Taylor responded that auto enrollment is a feature that is available in the plan but is not required, and that an annual percentage increase is available for the plan but is not in place. Commissioner Ross recommended that these features be evaluated and placed in the plan as a larger number of people is better for a savings device.

Ms. Shawa asked the Board of Trustees for acceptance of the 2018 Audited Financial Statements for the Defined Benefit Pension Plan, the Defined Contribution Pension Plan, and the Retire Benefit Plan (VEBA) which were audited by Baker Tilly.

Commissioner Price commented that it is good to hear a good news report for the retirement plans as he has heard other municipalities are in arrears on their retirement plans.

RESOLUTION 2018-11-11

Acceptance of 2018 Audited Financial Statements for Defined Benefit Pension Plan, Defined Contribution Pension Plan, and Retiree Benefit Plan

Resolved, that the Corporate Secretary receive and place on file the Defined Benefit, Defined Contribution, and Retiree Benefit Plan reports presented during the Pension Trustee Meeting.

Staff comments: All three Plans received clean audit reports.

Motion by Trustee Ross, Seconded by Trustee Thomas, to accept the 2018 Audited Financial Statements for Defined Benefit Pension Plan, Defined Contribution Pension Plan, and Retiree Benefit Plan (VEBA).

RESOLUTION 2018-11-12

<u>Travel & Reimbursement Policy – Board of Commissioners, Board Appointees,</u> <u>Employees and Investment Fiduciaries</u>

WHEREAS, the Board of Commissioners approved a BWL Travel & Reimbursement Policy ("Policy") on March 28, 2017 which served to combine and replace three existing policies and two previous resolutions; and

WHEREAS, the BWL staff has conducted a review of compliance with the Policy and determined additional clarifying language would enhance compliance; and

WHEREAS, it has been determined based on the feedback and review that revising the Policy to provide additional guidance and clarity would improve understanding of the Policy, improve compliance with the Policy, and reduce the time associated with administering the Policy; and

WHEREAS, the Board of Commissioners adopted the Policy as presented.

THEREFORE, it is:

RESOLVED, that the Trustees acknowledge the attached, updated Travel & Reimbursement Policy.

Motion by Trustee Ross, Seconded by Trustee Graham, to acknowledge the Travel & Reimbursement Policy for Board of Commissioners, Board Appointees, Employees and Investment Fiduciaries.

Action: Motion Carried

Ms. Shawa stated that last year a hard copy binder of the pension plans was provided to the Commissioners and an updated electronic copy, that will be available on demand, will be available on the dashboard in the near future. In addition, a quarterly pension report will be available on the dashboard.

Other

None.

Excused Absences None.

None.

<u>Adjourn</u>

There being no further business, the Pension Fund Trustees meeting adjourned at 6:54 p.m.



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MEMORANDUM

From: Heather Shawa, Chief Financial Officer To: Board of Water and Light Pension Trustees Date: November 14, 2019 Subject: Annual Pension Trustee Meeting – November 19, 2019

At the Annual Trustee Meeting to be held November 19, 2019, staff will give a brief overview of FY 2019 performance of the Defined Benefit Plan (DB), the Post-Employment Benefit Plan (VEBA), and the Defined Contribution and Deferred Compensation Plans (DC). Representatives from Asset Consulting Group (ACG) and Benassist Retirement Consulting (Benassist) will be present concerning DB and VEBA. ICMA-RC and Plante Moran Financial Advisors (PMFA) representatives will also be in attendance concerning DC.

Audited financial reports for each of the plans are included in the meeting packet. Baker Tilly has provided each plan with an unmodified opinion, indicating the financial statements present fairly, in all material respects, the fiduciary position of each plan as of June 30, 2019 in accordance with accounting principles generally accepted in the United States of America.

DB AND **VEBA** UPDATES

Actuarial Report Overview

Included in the packet are the actuarial reports for DB and VEBA. These actuarial reports were prepared by Benassist using census data as of February 28, 2019 and financial data as of June 30, 2019. Benassist calculated the funding status and actuarially determined contribution (ADC) for each plan. Of note, the VEBA funding status increased significantly from FY 2018 to FY 2019. This is primarily due to a large decrease in assumed post-65 health care premiums. This will be covered in further detail during the meeting. A brief overview of the complete report for each plan is shown below.

DB	As of 6/30/2019	As of 6/30/2018
Actuarially Determined Contribution	\$0	\$0
Total Pension Liability	\$53.8 million	\$55.8 million
Fiduciary Net Position	\$60.4 million	\$62.4 million
Funded Status	112.3%	111.9%
Net Pension (Asset) / Liability	(\$6.6 million)	(\$6.6 million)

VEBA	As of 06/30/2019	As of 06/30/2018
Actuarially Determined Contribution	\$7.0 million	\$7.5 million
Total OPEB Liability	\$148.5 million	\$203.5 million
Fiduciary Net Position	\$195.2 million	\$184.0 million
Funded Status	131.4%	90.4%
Net OPEB (Asset) / Liability	(\$46.6) million	\$19.4 million

Asset Class Allocation

Investments for DB and VEBA are directed by the plan sponsor, BWL, under the guidance of the current Statement of Investment Policies, Procedures And Objectives (IPS) for each plan. The IPS for each plan is included in the Trustee packet. Listed below are the asset class allocations for both DB and VEBA. Each of these allocations fall within the allowable allocation range as dictated by the IPS for each plan.

	Fund Allocation as of 06/30/2019	
Asset Class:	<u>DB</u>	<u>VEBA</u>
US Large Cap Equity:		
Loomis Sayles	12.59%	17.28%
Vanguard Russell 1000	12.44%	15.03%
US Small/Mid Cap Equity:		
Atlanta Capital	9.58%	0.00%
Aristotle	0.00%	9.89%
Non US Equity:		
Harding Loevner Int'l Equity	9.86%	9.46%
Lazard Int'l Equity	9.71%	9.35%
Fixed Income:		
JPMorgan Fixed Income	19.80%	21.24%
Fidelity Tactical Bond	9.97%	5.03%
BlackRock Strategic Income	8.97%	4.77%
Real Assets:		
AEW Core Property Trust	5.09%	7.88%
Cash & Cash Equivalents:		
Cash & Cash Equivalents	1.99%	0.08%

Management Fees

The current IPS prescribes that consideration will be given to fees prior to retaining professionals. The following table lists all fees associated with DB and VEBA funds as of June 30, 2019.

	Manager Fee	Custodial Fee	ACG Fee*	Total Fee
US Large Cap Equity				
Loomis Sayles	0.54 %	0.02 %	0.04 %	0.60 %
Vanguard Russell 1000	0.08 %	0.02 %	0.04 %	0.14 %
US Small/Mid Cap Equity				
Atlanta Capital	0.82%	0.02 %	0.04 %	0.88 %
Aristotle	0.65%	0.02 %	0.04 %	0.71 %
<i>Non US Equity</i> Harding Loevner Int'l Equity	0.81 %	0.02 %	0.04 %	0.87 %
Lazard Int'l Equity	0.81 %	0.02 %	0.04 %	0.87 %
Fixed Income				
JP Morgan Fixed Income	0.30 %	0.02 %	0.04 %	0.36 %
Fidelity Tactical Bond	0.36 %	0.02 %	0.04 %	0.42 %
BlackRock Strategic Income	0.74 %	0.02 %	0.04 %	0.80 %
Real Estate				
AEW Core Property Trust	1.10%	0.02 %	0.04 %	1.16 %

* ACG advisory fee is a flat dollar cost. For purposes of this report, this fee is shown as a weighted average of total assets under management.

Performance of Investment Managers

The charts on the following page show the DB and VEBA investment returns from inception through June 30, 2019 for the investment managers employed by the BWL as of June 30, 2019. These returns are compared to the market index that most closely resembles each investment manager's style as listed in the current, respective DB and VEBA IPS. Note that due to differing individual portfolio start dates, and different investment sectors, the comparative market index will vary from manager to manager.

DB		Inception Date	Return	Index
	Loomis Sayles	01/13	16.82%	16.24%
	Vanguard	05/17	7.70%	7.76%
	Atlanta Capital	08/18	10.33%	-0.16%
	Harding Loevner Int'l Equity	09/17	4.18%	2.82%
	Lazard Int'l Equity	09/17	3.38%	3.26%
	JP Morgan	01/09	4.32%	3.89%
	Fidelity Tactical Bond	09/18	7.88%	7.15%
	BlackRock Strategic Income	09/17	3.26%	3.25%
	AEW Core Property Trust	01/19	2.67%	1.99%
VEBA		Inception Date	Return	Index
VEBA	Loomis Sayles	Inception Date 01/13	Return 16.42%	Index 16.24%
VEBA		-		
VEBA	Loomis Sayles	01/13	16.42%	16.24%
VEBA	Loomis Sayles Vanguard	01/13 05/17	16.42% 7.71%	16.24% 7.76%
VEBA	Loomis Sayles Vanguard Aristotle	01/13 05/17 08/18	16.42% 7.71% -4.05%	16.24% 7.76% -0.16%
VEBA	Loomis Sayles Vanguard Aristotle Harding Loevner Int'l Equity	01/13 05/17 08/18 09/17	16.42% 7.71% -4.05% 4.18%	16.24% 7.76% -0.16% 2.82%
VEBA	Loomis Sayles Vanguard Aristotle Harding Loevner Int'l Equity Lazard Int'l Equity	01/13 05/17 08/18 09/17 09/17	16.42% 7.71% -4.05% 4.18% 3.38%	16.24% 7.76% -0.16% 2.82% 3.26%
VEBA	Loomis Sayles Vanguard Aristotle Harding Loevner Int'l Equity Lazard Int'l Equity JP Morgan	01/13 05/17 08/18 09/17 09/17 01/09	16.42% 7.71% -4.05% 4.18% 3.38% 4.35%	16.24% 7.76% -0.16% 2.82% 3.26% 3.89%
VEBA	Loomis Sayles Vanguard Aristotle Harding Loevner Int'l Equity Lazard Int'l Equity JP Morgan Fidelity Tactical Bond	01/13 05/17 08/18 09/17 09/17 01/09 09/18	16.42% 7.71% -4.05% 4.18% 3.38% 4.35% 7.83%	16.24% 7.76% -0.16% 2.82% 3.26% 3.89% 7.15%

DC UPDATES

During Q3 of Fiscal Year 2019, as recommended by PMFA, the BWL implemented various DC fund lineup and fee structure changes. The changes benefit participants in the following ways:

- Simplified investment menu using best in class fund managers
- Lowest cost version of each investment option
- Increased access to passive investments
- Consistent default age matrix for all plans
- Increased transparency of plan costs
- More equitable split of plan costs

The investment options are continually monitored by PMFA. During the monitoring process, PMFA will recommend proposed changes to the Retirement Plan Committee as necessary. For reference below, Exhibit 1 shows the fund lineup, consisting of 40 funds, prior to the changes, and Exhibit 2 shows the fund lineup, consisting of 26 funds, after the changes.

Exhibit 1

		DOMESTIC EQUITY	
	VALUE	BLEND	GROWTH
	VT Vantagepoint Equity Income AllianzGI NFJ Dividend Value	Vanguard 500 Index Admiral American Funds Fundamental Inv JPMorgan US Equity I	Fidelity Contrafund American Funds Growth Fund of America R
2		Vanguard Mid-Cap Index Admiral Westwood SMidCap Institutional	Harbor Mid Cap Growth Admin
	Columbia Small/Mid Cap Value Columbia Small Cap Value I	Vanguard Small-Cap Index Adm Fidelity Small Cap Discovery	AMG TimesSquare Sm Cap Growth N
	MONEY MARKET/CAPITAL PRESERVATION	CORE FIXED INCOME	OTHER FIXED INCOME
	VT PLUS Fund VT Cash Management	Vanguard Total Bond Market Index Adm PIMCO Total Return Insti	PIMCO Low Duration PIMCO Real Return Adm Delaware High-Yield Opp Instl
	INTERNATIONAL/WORLD EQUITY	TARGET DATE	OTHER
	American Funds Cap World G&l Harbor International Inst Fidelity Intl Discovery Fidelity Diversified Intl VT Vantagepoint MP Global Equity Gr	Vanguard Target Retire Income Vanguard Target Dates (2015-2050)	Fidelity Balanced BlackRock Global Allocation PGIM Jennison Utility A Nuveen Real Estate Securities T Rowe Price Health Sciences AllianzGI Technology Admin VT Vantagepoint MP Craditional Growth VT Vantagepoint MP Traditional Growth VT Vantagement MP Long-Term Growth VT Retirement Income Advantage Vantage Brokerage

Exhibit 2

		DOMESTIC EQUITY	
1	VALUE	BLEND	GROWTH
	John Hancock Disciplined Value R6	Fidelity 500 Index Fund	MainStay Large Cap Growth I Fidelity Contrafund®
1	JPMorgan Mid Cap Value R6	Fidelity Mid Cap Index Fund	T. Rowe Price Instl Mid Cap Growth
	American Beacon Small Cap Value R6	Fidelity Small Cap Index Fund	AMG TimesSquare Small Cap Growth
	MONEY MARKET/CAPITAL PRESERVATION	CORE FIXED INCOME	OTHER FIXED INCOME
	VT PLUS Fund R10	Fidelity U.S. Bond Index Fund PIMCO Total Return A	PIMCO Real Return Insti PIMCO Income Insti
	INTERNATIONAL/WORLD EQUITY	TARGET DATE	OTHER
	Vanguard Total Intl Stock Index Adm Vanguard International Growth Adm American Funds EuroPacific Growth R6 Oakmark International Adv American Funds Cap World G&I R6	Vanguard Target Date Funds (5 year increments & Income fund)	Fidelity Balanced Nuveen Real Estate Securities I VT Retirement Income Advantage Vantage Brokerage

Retirement Plans Dashboard: FY 2019



Lansing Board of	Wa	ter & Light: I	Defined Benefit Plan -	06/30/2019	
Funding Status				Returns	
Fiduciary Net Position	\$	60,421,846			
Total Pension Liability \$ 53,826,119			FY 2019 Return on Assets		7.399
Funding Status		112.25%	Expected Return		7.00%
Average Funding Percentage ¹		72%	Median Expected Return ²		7.25%
Actuarially Determined Contribution (ADC)	\$	-	% Over/Under Median		-0.25%
FY 2019 Total Revenues	\$	356,884,521			
ADC as % of Revenues		0.00%			
Change in Assets			Pa	articipants ³	
FY 2019 Beginning Market Value	\$	62,366,985			
FY 2019 Contributions	\$	-	Total Active Participants		!
FY 2019 Net Investment Income	\$		Total Inactive Participants		3
FY 2019 Distributions	\$		Total Retiree Participants		337
FY 2019 Ending Market Value	\$		Total Participants		34
FY 2019 Inc/(Dec) in Market Value	\$	(1,945,139)			
			llocation		
		Asset Class	Allocation	Target Allocati	ion
	US I	Equity	35%	25 - 45%	
Non-US Equity Fixed Income			20%	15 - 25%	
			39%	20 - 50%	
	Rea	l Assets	5%	0 - 10%	
		h & Equivalents	2%	0 - 5%	
Projected Benefit Payn	nen	ts	Historical	vs Expected Returns	
	2040	2044 2048	25% 15% -5% -15% -25% 2008 2010 2012 2014 2016 201 -25% 2008 2010 Expected Return (7.5% to 2		
Retiree/Inactive	A		Fees		,
Туре		11011	Annual Fees Paid	% of Assets	
				295,193	0.479
					0.4//
Investment Fees ⁴					0 0 29
			\$ \$	11,917 55,000	0.029 0.099

Lansing Board	d of	Water & Ligh	t: VEBA Plan - 06/30/201	9		
Funding Status			Retur	ns		
Fiduciary Net Position	\$	195,158,575				
Total OPEB Liability	\$	148,549,677	FY 2019 Return on Assets		6.36	
Funding Status		131.38%	Expected Return		7.50	
Prior Year Funding Percentage			Prior Year Expected Return		7.50	
Actuarially Determined Contribution (ADC)	\$	7,030,548	% Over/Under Prior Year		0.00	
FY 2019 Total Revenues	\$	356,884,521				
ADC as % of Revenues		1.97%				
Change in Assets			Participa	ants ³		
Y 2019 Beginning Market Value	\$	184,039,624				
Y 2019 Contributions	\$	9,277,538	Total Active Participants		69	
Y 2019 Net Investment Income	\$	11,118,951	Total Retiree Participants		74	
Y 2019 Distributions	\$	(9,277,538)	Total Participants		1,43	
Y 2019 Ending Market Value	\$	195,158,575				
Y 2019 Inc/(Dec) in Market Value	\$	11,118,951				
		Asset Allo	cation			
		Asset Class	Allocation %	Target Allocatio	<u>n</u>	
	42%	30 - 50%				
US Equity Non-US Equity Fixed Income			19%	15 - 25%		
			31%	10 - 50%		
	Rea	l Assets	8%	0% - 20%		
		h & Equivalents	0%	0% - 5%		
Projected Benefit Payr	nen	ts	Historical vs Expe	ected Returns		
\$20			25%			
			15%	4		
\$15			15%			
<u>د</u>	ш		5%			
\$10 \$10	Ht		-5%			
\$5 \$5			-15%			
s-			-25%			
2020 2024 2028 2032 2036	204	0 2044 2048	2008 2010 2012 2	2014 2016 2018		
Retiree	Acti	ve	ReturnsEx	pected Return of 7.50%		
		Plan Fo				
[uno		Fiall F	Annual Fees Paid	% of Assets		
Гуре nvestment Fees⁴				% OF ASSETS	0.4	
Custodial Fees			\$ 890,617			
Lustodiai Fees Advisory Fees ⁵			\$ 36,682 \$ 55,000		0.0	
			5 000		-0.0	

Average Funding for State and Local Pensions nationwide as of 2018. Data obtained from Public Plans Database and PENDAT as provided by BWL's external advisor, ACG.

2 Median Investment Return Assumption for Public Pensions from FY19 data obtained from NASRA Public Fund Survey Summary of Findings as provided by BWL's external advisor, ACG.

3 Participant data is based on the actuarial census date of February 28, 2019.

4 Certain investment fees are charged on a "% of Assets" basis and have been converted to a dollar amount for purposes of comparison.

5 Advisory fees are a flat dollar amount and have been converted to a "% of Assets" basis for purposes of comparison.

Where external benchmark data was unavailable, prior year BWL data was used for comparison. Investment manager and advisory fees are accounted for on an accrual basis for dashboard purposes and cash basis for audit purposes.

Displayed values may not total or match other reports due to rounding.

Retirement Plans Dashboard: FY 2019





401(a) Plans are Employer Contribution only and subject to a vesting period.

2 457(b) Plan is Employee Contribution with an Employer Contribution of \$1,000 and an additional Employer Match up to \$1,500 per calendar year.

Displayed values may not total or match other reports due to rounding.

Financial Report

with Required Supplementary Information As of and for the Years Ended June 30, 2019 and 2018

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INDEPENDENT AUDITORS' REPORT

To the Honorable Mayor, Members of the City Council, and Commissioners of the Board of Water and Light Lansing Board of Water and Light Defined Benefit Plan and Trust for Employees' Pensions City of Lansing, Michigan

We have audited the accompanying financial statements of the Lansing Board of Water and Light Defined Benefit Plan and Trust for Employees' Pensions ("Plan") as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary position of the Plan as of June 30, 2019 and 2018, and the respective changes in fiduciary position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Baker Tilly Virchaw Krause, LP

Madison, Wisconsin September 5, 2019

Management's Discussion and Analysis

Using this Annual Report

This annual report consists of two parts: (1) Management's Discussion and Analysis (this section) and (2) the financial statements. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data.

Condensed Financial Information

The table below compares key financial information in a condensed format between the current year and the prior two years:

	 2019	 2018	 2017
Assets held in trust:			
Money market collective trust fund	\$ 1,963,325	\$ 1,890,701	\$ 1,088,909
U.S. government obligations	4,873,353	7,966,488	9,053,469
Fixed income securities	6,379,674	12,372,866	12,156,276
Mutual funds	36,596,278	26,341,508	22,381,599
Partnership	-	-	1,117,790
Common stock	10,529,824	13,634,806	19,938,242
Trade Receivable due from Broker	-	11,853	46,051
Interest and dividend receivable	 85,635	 148,763	 153,010
Total assets held in trust	\$ 60,428,089	\$ 62,366,985	\$ 65,935,346
Liabilities - Accrued liabilities	\$ 6,242	\$ -	\$ 11,533
Net position restricted for pension	 60,421,847	 62,366,985	 65,923,813
Total liabilities and net position	\$ 60,428,089	\$ 62,366,985	\$ 65,935,346
Changes in net position:			
Net investment income (loss)	\$ 4,380,722	\$ 3,112,090	\$ 8,271,675
Benefits payments	(6,142,622)	(6,413,954)	(7,472,625)
Administrative fees	 (183,238)	 (254,964)	 (317,072)
Net change in net position	\$ (1,945,138)	\$ (3,556,828)	\$ 481,978

Management's Discussion and Analysis

During fiscal year 2019, net investment gain was \$4,380,722. We believe this performance is consistent with the experience of similarly situated employee benefit funds.

The Board of Water and Light – City of Lansing, Michigan's ("BWL") actuarially determined contribution (ADC) as determined by the BWL's actuary was \$0 in fiscal year 2019, therefore no employer contributions were made.

Investment Objectives and Asset Allocation

The Defined Benefit Plan and Trust for Employees' Pensions ("Plan") assets shall be invested in accordance with sound investment practices that emphasize long-term investment fundamentals. In establishing the investment objectives of the Plan, the BWL has taken into account the time horizon available for investment, the nature of the Plan's cash flows and liabilities, and other factors that affect the Plan's risk tolerance.

In consideration of the Plan's investment goals, demographics, time horizon available for investment, and the overall risk tolerance of the BWL, a long-term investment objective of income and growth has been adopted for the Plan's assets. The primary objectives of the Plan's assets are to fund all disbursements as they are due to meet the actuarial rate of return of 7 percent, and to earn returns in excess of a passive set of market indexes representative of the Plan's asset allocation.

Consistent with the advice of the investment advisor, the BWL has selected the following target asset allocation strategy:

Asset Class	Target Asset Allocation
Core bonds	20%
Multi-sector	1 0%
Liquid absolute return	10%
U.S. large cap equity	25%
U.S. small cap equity	10%
Non–U.S. equity	20%
Core real estate	<u>_5%</u>
Total	100%

Management's Discussion and Analysis

Future Events

The Plan is currently overfunded, with a funded ratio (fiduciary net position divided by total pension liability) of 112 percent. This funding level results in an annual pension expense of \$0 for fiscal year 2019. The BWL does not expect to make contributions to the trust in fiscal year 2020.

The Plan expects to make annual withdrawals of approximately \$6,000,000 to cover participant benefits in fiscal year 2020.

Contacting the Plan's Management

This financial report is intended to provide a general overview of the Plan's finances and to show accountability for the money it receives. If you have questions about this report or need additional information, you may write the Lansing Board of Water and Light, Chief Financial Officer, P.O. Box 13007, Lansing, Michigan 48901–3007.

Statement of Plan Fiduciary Net Position

	As of June 30				
		2019		2018	
Assets					
Investments at fair value:					
Cash and money market trust fund	\$	1,963,325	\$	1,890,701	
U.S. government obligations		4,873,353		7,966,488	
Fixed income securities		6,379,674		12,372,866	
Mutual funds		36,596,278		26,341,508	
Common stocks		10,529,824		13,634,806	
Total investments at fair value		60,342,454		62,206,369	
Trade receivable - due from broker		-		11,853	
Receivable - investment interest receivable		85,635		148,763	
Total assets		60,428,089		62,366,985	
Liabilities					
Trade payable - due to broker		6,242			
Net Position Restricted for Pensions	\$	60,421,847	\$	62,366,985	

Statement of Changes in Plan Fiduciary Net Position

	For the Year Ended June 30			
	2019		2018	
Additions				
Investment income:				
Net appreciation in fair				
value of investments	\$	2,540,532	\$ 1	,521,207
Interest and dividend income		1,840,190	1	,590,883
Total investment income		4,380,722	3	,112,090
Deductions				
Retiree benefits paid		6,142,622	6	,413,954
Administrative expenses		183,238		254,964
Total deductions		6,325,860	6	668,918
Net Increase (Decrease) in Net Position		(1,945,138)	(3	,556,828)
Net Position Restricted for Pensions				
Beginning of year		62,366,985	65	,923,813
End of year	\$	60,421,847	<u>\$ 62</u>	.,366,985

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 - Summary of Significant Accounting Policies

Reporting Entity

The Board of Water and Light – City of Lansing, Michigan ("BWL") sponsors the Defined Benefit Plan and Trust for Employees' Pensions ("Plan"), which is a noncontributory single-employer defined benefit, public employee retirement system established and administered by the BWL under Section 5–203 of the City Charter. A participant's interest shall be fully vested when the participant has been credited with seven years of vesting service. The Plan was established in 1939 and has been amended several times, with the latest amendment taking effect on July 1, 2010. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

Accounting and Reporting Principles

The Plan follows accounting principles generally accepted in the United States of America (GAAP) as applicable to governmental units. Accounting and financial reporting pronouncements are promulgated by the Governmental Accounting Standards Board.

Basis of Accounting

Fiduciary funds use the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions to the Plan are recognized when due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

Report Presentation

This report includes the fund-based statements of the Plan.

Investment Valuation and Income Recognition – Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales prices. Investments that do not have an established market are reported at estimated fair value.

Note 1 - Summary of Significant Accounting Policies (Continued)

Report Presentation (Continued)

Purchases and sales of securities are recorded on a trade-date basis.

Appreciation or depreciation of investments is calculated based on the beginning of year fair value of investments.

Expenses – Substantially all Plan expenses are paid by the Plan.

Use of Estimates – The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Regulatory Status – The Plan is not subject to the reporting requirements of the Employee Retirement Income Security Act of 1974 (ERISA) as it has been established for the benefit of a governmental unit.

Note 2 - Plan Description

Plan Administration – The BWL administers the Plan – a noncontributory singleemployer defined benefit pension plan for employees of the BWL. The benefit terms were established by the BWL and may be amended by future BWL actions.

Management of the Plan is vested in the BWL, which consists of eight members appointed by the mayor of the City of Lansing, Michigan.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 - Plan Description (Continued)

Plan Membership – At February 28, 2019 and February 28, 2018 (the most recent actuarial valuation for funding purposes), Plan membership consisted of the following:

	2019	2018
Inactive Plan members or beneficiaries currently receiving benefits	337	352
Inactive Plan members entitled to but not yet receiving benefits Active Plan members	3	4
Total	345	364

The Plan, by resolution of the Board of Commissioners, was closed to employees hired subsequent to December 31, 1996, and a defined contribution plan was established for employees hired after December 31, 1996. Effective December 1, 1997, all active participants in this Plan were required to make an irrevocable choice to either remain in this Plan (defined benefit) or move to the newly established defined contribution plan. Those participants who elected to move to the defined contribution plan received lump-sum distributions from this Plan that were rolled into their accounts in the newly established defined contribution plan. Of the 760 employees who were required to make this election, 602 elected to convert their retirement benefits to the newly established defined contribution plan. As a result of this action, effective December 1, 1997, the Board of Commissioners transferred \$75,116,470 to the newly established defined contribution plan, reflecting the Plan participants' accumulated benefits as of said date.

Benefits Provided – The Plan provides retirement, early retirement, disability, termination, and death benefits. The Plan provides for an annual benefit upon normal retirement age equal to the product of the total number of years of credited service multiplied by a percentage equal to 1.80 percent of the highest annual pay during the last 10 years of service, paid in equal monthly installments.

Note 2 - Plan Description (Continued)

Payments will either be nonincreasing or increase only as follows: (a) by an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the Bureau of Labor Statistics; (b) to the extent of the reduction in the amount of the employee's payments to provide for a survivor benefit upon death, but only if the beneficiary whose life was being used to determine the distribution period described in subsection 8 dies or is no longer the employee's beneficiary pursuant to a qualified domestic relations order within the meaning of Internal Revenue Code Section 414(p); (c) to provide cash refunds of employee contributions upon the employee's death; or (d) to pay increased benefits that result from a Plan amendment.

Contributions – Article 9, Section 24 of the State of Michigan constitution requires that financial benefits arising on account of employee service rendered in each year be funded during that year. Accordingly, the BWL Pension Board retains an independent actuary to determine the annual contribution. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. There was no contribution required for the years ended June 30, 2019 and 2018. Plan documents do not require participant contributions.

Plan Termination – Although the BWL Pension Board has not expressed any intent to terminate the Plan, the BWL Pension Board has the right to do so at any time. If the Plan is terminated, each employee who has a pension benefit under the Plan will be fully vested in that benefit. Those benefits shall be calculated on Plan termination as though each person had elected to receive his or her accrued benefit as a lump sum amount, although no employee would be required to accept his or her Plan termination distribution in the form of a lump sum. The lump sum amount to be paid to each individual in any of the forms permitted by the Plan would be calculated in accordance with the Plan document. On termination of the Plan, each employee would have recourse toward satisfaction of his or her nonforfeitable benefit from the Plan assets and from the general assets of the BWL and its successor.

The Pension Trust Fund is also authorized by Michigan Public Act 314 of 1965, as amended, to invest in certain reverse repurchase agreements, stocks, diversified investment companies, annuity investment contracts, real estate leased to public entities, mortgages, real estate, debt or equity of certain small businesses, certain state and local government obligations, and certain other specified investment vehicles.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 3 - Cash, Investments, and Fair Disclosure

The Plan's deposits and investment policies are in accordance with PA 196 of 1997; the Plan has authorized the investments according to Michigan PA 314 of 1965, as amended.

Custodial Credit Risk of Bank Deposits – Custodial credit risk is the risk that in the event of a bank failure, the Plan's deposits may not be returned to it. The Plan requires that financial institutions must meet minimum criteria to offer adequate safety to the Plan. The Plan evaluates each financial institution with which it deposits funds and only those institutions meeting minimum established criteria are used as depositories. The Plan does not have any deposits exposed to custodial credit risk.

Custodial Credit Risk of Investments – Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Plan does not have a policy for custodial credit risk. At year end, all investments of the Plan were held in the name of the Board of Water and Light and are therefore not subject to custodial credit risk.

Interest Rate Risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of investments. The Plan's investment policy does not restrict investment maturities, other than commercial paper, which can only be purchased with a 270-day maturity. The average maturities of investments are as follows as of June 30, 2019:

			Weighted	
Investment	Fair Value		Average Maturity	
U.S. government obligations	\$	4,873,353	13.71 Years	
Fixed income securities		6,379,674	11.82 Years	
Money market trust fund		1,963,325	Less than 1 year	
Portfolio weighted average maturity			12.64 years	

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 3 - Cash, Investments, and Fair Disclosure (Continued)

The average maturities of investments are as follows as of June 30, 2018:

		Weighted
Investment	Fair Value	Average Maturity
U.S. government obligations	\$ 7,966,488	12.19 Years
Fixed income securities	12,372,866	12.46 Years
Money market trust fund	1,890,701	Less than 1 year
Portfolio weighted average maturity		12.35 years

Credit Risk – State law limits investments in commercial paper to the top two ratings issued by nationally recognized statistical rating organizations. The Plan has no investment policy that would further limit its investment choices. The credit quality ratings of debt securities are as follows as of June 30, 2019:

Investment	Fair Value	Rating	Rating Organization
U.S. government obligations - implicitly guaranteed	1,666,023	AA+	S&P
U.S. government obligations - implicitly guaranteed	59,624	AA	S&P
Fixed income securities	529,124	AAA	S&P
Fixed income securities	2,408,117	AA+	S&P
Fixed income securities	193,685	AA	S&P
Fixed income securities	151,245	AA-	S&P
Fixed income securities	239,539	A+	S&P
Fixed income securities	421,563	А	S&P
Fixed income securities	589,348	A-	S&P
Fixed income securities	982,484	BBB+	S&P
Fixed income securities	504,100	BBB	S&P
Fixed income securities	276,899	BBB-	S&P
Fixed income securities	8,000	BB+	S&P
Fixed income securities	75,570	B-	S&P
Money market trust funds	1,963,325	Not rated	Not rated

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 3 - Cash, Investments, and Fair Disclosure (Continued)

The credit quality ratings of debt securities are as follows as of June 30, 2018:

			Rating
Investment	Fair Value	Rating	Organization
U.S. government obligations - implicitly guaranteed	\$ 2,767,597	AA+	S&P
U.S. government obligations - implicitly guaranteed	58,089	AA-	S&P
Fixed income securities	893,567	AAA	S&P
Fixed income securities	5,410,018	AA+	S&P
Fixed income securities	657,692	AA	S&P
Fixed income securities	147,017	AA-	S&P
Fixed income securities	302,057	A+	S&P
Fixed income securities	1,139,433	А	S&P
Fixed income securities	829,820	A-	S&P
Fixed income securities	1,616,048	BBB+	S&P
Fixed income securities	901,500	BBB	S&P
Fixed income securities	377,545	BBB-	S&P
Fixed income securities	8,030	BB+	S&P
Fixed income securities	90,140	В-	S&P
Money market trust funds	1,890,701	Not rated	Not rated

Note 4 - 401(h) Account

Effective July 1, 1999, the Plan was amended to include a medical-benefit component, in addition to the normal retirement benefits, to fund a portion of the postretirement obligations for certain retirees and their beneficiaries in accordance with Section 401(h) of the Internal Revenue Code (IRC). A separate account has been established and maintained in the Plan for the net assets related to the medical-benefit component 401(h) account. In accordance with IRC Section 401(h), the Plan's investments in the 401(h) account may not be used for, or diverted to, any purpose other than providing health benefits for retirees and their beneficiaries. Employer contributions or qualified transfers to the 401(h) account are determined annually and are at the discretion of the Plan sponsor. At June 30, 2019 and 2018, there were no excess Plan assets available for transfer.

Note 5 - Tax Status

The Plan obtained, from the Internal Revenue Service, a determination letter dated November 4, 2011. The letter affirmed that the Plan complied with the requirements of Internal Revenue Code section 401(a). The Plan continues to operate as a qualified plan.

Note 6 - Plan Investments - Policy and Rate of Return

Investment Policy – The Plan's policy in regard to the allocation of invested assets is established and may be amended by the BWL by a majority vote of its members. It is the policy of the board to pursue an investment strategy that manages risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The Plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. The following was the BWL's adopted asset allocation policy as of June 30, 2019 and 2018:

Asset Class	2019 Target Allocation	2018 Target Allocation		
Global Fixed Income	40%	40%		
U.S. Equities	35%	35%		
Non–U.S. Equities	20%	20%		
Commercial real estate	5%	5%		

Rate of Return – For the year ended June 30, 2019, the annual money-weighted rate of return on plan investments, net of plan investment expense, was 7.39 percent. For the year ended June 30, 2018, the annual money-weighted rate of return on plan investments, net of plan investment expense, was 4.97 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Note 7 - Net Pension Asset of the BWL

The components of the net pension asset of the BWL at June 30, 2019 and 2018 were as follows (in thousands):

	2019		2018	
Total pension liability	\$	53,826	\$	55,751
Plan fiduciary net pension		60,422		62,367
Plan's net pension asset	\$	(6,596)	<u>\$</u>	(6,616)
Plan fiduciary net position, as a percentage of the total pension liability		112.25%		111.87%

Actuarial Assumptions – The June 30, 2019 total pension liability was determined by an actuarial valuation as of February 28, 2019, which used updated procedures to roll forward the estimated liability to June 30, 2019. The June 30, 2018 total pension liability was determined by an actuarial valuation as of February 28, 2018, which used updated procedures to roll forward the estimated liability to June 30, 2018. The total pension liability is determined by the Plan's independent actuary and is that amount that results from applying actuarial assumptions to adjust the total pension liability of payment (by means of decrements such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment. Benassist Actuaries was the actuary for the February 28, 2019 and February 28, 2018 valuations, respectively. The valuations used the following actuarial assumptions, applied to all periods included in the measurement:

	<u>February 28, 2019</u>	<u>February 28, 2018</u>
Inflation	2.50%	3.00%
Salary increases	3.50%	3.50%

The most recent experience review was completed in 2014. Since the Plan only covered 17 active participants in fiscal year 2014, assumptions like termination, retirement, and disability have an immaterial impact on the results and have not been changed.

Note 7 - Net Pension Asset of the BWL (Continued)

The mortality table was based on the PUB-2010 General Mortality Table, Male and Female, projected generationally using the MP-2018 projection scale for the June 30, 2019 valuation. The June 30, 2018 valuation used the RP-2014 Total Dataset Mortality adjusted to 2006 and projected using the MP-2017 scale.

Discount Rate – The discount rate used to measure the total pension liability was 7.0 percent for both June 30, 2019 and June 30, 2018. The projection of cash flows used to determine the discount rate in both years assumed that BWL contributions will be made at rates equal to the actuarially determined contribution rates.

Projected Cash Flows Section – Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The long-term expected rate of return on Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return as of June 30, 2019 and 2018 for each major asset class included in the Plan's target asset allocation, as disclosed in Note 6, are summarized in the following table:

Asset Class	2019 Long-term Expected Real Rate of Return	2018 Long-term Expected Real Rate of Return		
Fixed income	3.29%	3.23%		
Domestic equity	7.61%	7.89%		
International equity	8.34%	8.73%		
Real estate	6.78%	5.91%		

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 7 - Net Pension Asset of the BWL (Continued)

Sensitivity of the Net Pension Asset to Changes in the Discount Rate – The following presents the net pension asset of the BWL at June 30, 2019, calculated using the discount rate of 7.0 percent, as well as what the BWL's net pension asset would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0 percent) or 1 percentage point higher (8.0 percent) than the current rate:

	Current					
	1% Decrease (6.00%)		Discount Rate (7.00%)		1% Increase (8.00%)	
Net pension liability (asset) of the						
BWL (in thousands)	\$	(1,697)	\$	(6,596)	\$ (9,365)	

The following presents the net pension asset of the BWL at June 30, 2018, calculated using the discount rate of 7.0 percent, as well as what the BWL's net pension asset would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0 percent) or 1 percentage point higher (8.0 percent) than the current rate:

	Current					
	1% Decrease (6.00%)		Discount Rate (7.00%)		1% Increase (8.00%)	
Net pension liability (asset) of the BWL (in thousands)	\$	(1,539)	\$	(6,616)	\$ (9,467)	

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Fair Value Measurements

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three Levels of the fair value hierarchy under authoritative guidance are described as follows:

- Level 1 Inputs to the valuation methodology are unadjusted quoted market prices for identical assets in active markets that the Plan has the ability to access.
- Level 2 Inputs to the valuation methodology include:
 - > quoted prices for similar assets or liabilities in active markets;
 - quoted prices for identical or similar assets or liabilities in inactive markets;
 - inputs other than quoted prices that are observable for the asset or liability;
 - > inputs that are derived principally from or corroborated by observable market data by correlation or other means; and
 - > if the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.
- Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observables and minimize the use of unobservable inputs.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Fair Value Measurements (Continued)

The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at June 30, 2019 and 2018:

Money market fund: Valued at the quoted net asset value ("NAV") of shares held by the Plan at year end.

U.S. government obligations, common stock and fixed income securities: Valued at the most recent closing price reported on the market on which individual securities are traded.

Mutual funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily NAV and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Fair Value Measurements (Continued)

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of June 30, 2019 and 2018:

Investment Type	Level 1	Level 2	Level 3	Total
Cash and money market trust fund	\$ -	\$ 1,963,325	\$ –	\$ 1,963,325
U.S. government obligations	-	4,873,353	-	4,873,353
Fixed income securities	-	6,379,674	-	6,379,674
Mutual funds	-	36,596,278	-	36,596,278
Common stocks	10,529,824			10,529,824
Total	\$ 10,529,824	\$ 49,812,630	\$	\$ 60,342,454

Investment Type	Level 1	Level 2	Level 3	Total		
Cash and money market trust fund	\$ –	\$ 1,890,701	\$ –	\$ 1,890,701		
U.S. government obligations	-	7,966,488	-	7,966,488		
Fixed income securities	-	12,372,866	-	12,372,866		
Mutual funds	-	26,341,508	-	26,341,508		
Common stocks	13,634,806			13,634,806		
Total	<u>\$ 13,634,806</u>	\$ 48,571,563	<u>\$ </u>	<u>\$ 62,206,369</u>		

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 9 – Risks and Uncertainties

The total pension liability is reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

In addition, the Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the Statement of Plan Fiduciary Net Position.

Note 10 – Subsequent Events

The Plan has evaluated subsequent events occurring through the date that the Plan's financial statements were approved and available to be issued, for events requiring recording or disclosure in the Plan's financial statements. There are no subsequent events warranting disclosures.

Required Supplementary Information

Required Supplemental Information (Unaudited) Schedule of Changes in the BWL's Net Pension Asset and Related Ratios Last Ten Fiscal Years (in thousands)

		2019	2018	2017	2016	2015	2014	2013	2012*	2011*	2010*
Total Pension Liability											
Service cost	\$	60 \$	50	\$ 113	\$ 223	\$ 274 \$	349	\$ 407	\$	- \$	- \$ -
Interest		3,691	4,031	4,317	4,625	4,919	4,751	5,085		-	
Changes in benefit terms		-	-	-	-	-	-	-			
Differences between expected and actual experience		(743)	(230)	(383)	299	(1,093)	964	(1,716)		-	
Changes in assumptions		1,210	1,419	(857)	(1,468)	-	4,538	-			
Benefit payments, including refunds		(6,143)	(6,414)	(7,473)	(7,896)	(8,046)	(8,541)	(7,777)		<u> </u>	
Net Change in Total Pension Liability		(1,925)	(1,144)	(4,283)	(4,217)	(3,946)	2,061	(4,001)		-	
Total Pension Liability - Beginning of year		55,751	56,895	61,178	65,395	69,341	67,280	71,281			<u> </u>
Total Pension Liability - End of year		53,826	55,751	56,895	61,178	65,395	69,341	67,280		-	
Plan Net Position											
Contributions - Employer		-	-	-	-	-	-	-		-	
Contributions - Member		-	-	-	-	-	-	-		-	
Net investment income		4,381	3,112	8,272	47	1,771	14,243	10,170			
Administrative expenses		(183)	(255)	(317)	(388)	(576)	(596)	(536)			
Benefit payments, including refunds		(6,143)	(6,414)	(7,473)	(7,896)	(8,045)	(8,541)	(7,777)		-	
Other		<u> </u>	-	-		<u> </u>	-				<u> </u>
Net change in Net Position Held in Trust		(1,945)	(3,557)	482	(8,237)	(6,850)	5,106	1,857		-	
Net Position Restricted for Pensions - Beginning of year		62,367	65,924	65,442	73,679	80,529	75,424	73,567		- <u> </u>	<u> </u>
Net Position Restricted for Pensions - End of year		60,422	62,367	65,924	65,442	73,679	80,530	75,424		<u> </u>	<u> </u>
BWL Net Pension Asset - Ending	<u>\$</u>	(6,596) \$	(6,616)	<u>\$ (9,029</u>)	\$ (4,264)	<u>\$ (8,284)</u>	6 (11,189)	<u>\$ (8,144)</u>	<u>\$</u>	<u>\$</u>	<u>- \$ -</u>
Plan Net Position as a % of Total Pension Liability		112.25%	111.87%	115.87%	106.97%	112.67%	116.14%	112.10%	- %	5 - 9	% - %
Covered Employee Payroll BWL's Net Pension Asset as a % of Covered Employee Payroll	\$	406 \$ (1,625%)	603 (1,097%)	\$		\$ 1,018 \$ (814%)	5 1,225 (913%)	\$ 1,684 (484%)	\$- - %	\$ - 5 - °	\$- % - %

*GASB Statement No. 67 was implemented as of June 30, 2014. Information from 2010 - 2012 is not available and this schedule will be presented on a prospective basis.

Required Supplemental Information (Unaudited) Schedule of Employer Contributions Last Ten Fiscal Years (in thousands)

	 2019	 2018	 2017	 2016	2	2015	2014	 2013	 2012	 2011	 2010
Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ 86 86	\$ 2,109 2,109
Contribution Deficiency (Excess)	\$ 	\$ 	\$ -	\$ -	\$	-	\$ 	\$ 	\$ -	\$ -	\$ -
Covered Employee Payroll	\$ 406	\$ 603	\$ 586	\$ 772	\$	1,018	\$ 1,225	\$ 1,684	\$ 2,101	\$ 2,398	\$ 2,660
Contributions as a Percentage of Covered Employee Payroll	- %	- %	- %	- %		- %	- %	- %	- %	3.59%	79.29%

Notes to Required Supplementary Information (Unaudited) Year Ended June 30, 2019

Actuarial valuation information relative to the determination of contributions:

Valuation date	June 30, 2019, based on roll-forward of February 28, 2019 valuation

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age method
Amortization method	Level dollar over a 15-year period
Remaining amortization period	15 years
Asset valuation method	Market value of the assets
Inflation	2.5 percent
Salary increases	3.5 percent per year
Investment rate of return	7.0 percent per year compounded annually
Mortality	PUB-2010 General Mortality Table with MP-2018 Improvement Scale

Changes to assumptions: The mortality table was changed to the PUB-2010 General Mortality Table and the improvement scale was updated to the MP-2018 improvement scale.

Actuarial valuation information relative to the determination of contributions:

Valuation date June 30, 2018, based on roll-forward of February 28, 2018 valuation

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age method
Amortization method	Level dollar over a 15-year period
Remaining amortization period	15 years
Asset valuation method	Market value of the assets
Inflation	3.0 percent
Salary increases	3.5 percent per year
Investment rate of return	7.0 percent per year compounded annually
Mortality	RP-2014 Mortality Table with MP-2017 Improvement Scale

Changes to assumptions: The mortality projection scale was updated from the RP-2014 Total Dataset adjusted to 2006 and using the MP-2017 improvement scale. The assumed form of payment for active participants was changed from life annuity to a 100% joint and survivor annuity. The discount rate and the expected long term rate of return on assets was decreased from 7.50% to 7.00%.

Required Supplemental Information (Unaudited) Schedule of Investment Returns Last Ten Fiscal Years

	2019	2018	2017	2016	2015	2014	2013*	2012*	2011*	2010*
Annual money-weighted rate of returr										
net of investment expense	7.39%	4.97%	12.10%	(0.49%)	1.55%	19.18%	- %	- %	- %	- %

*GASB 67 was implemented as of June 30, 2014. Information from 2010 - 2013 is not available and this schedule will be presented on a prospective basis

Lansing Board of Water and Light

Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report

July 12, 2019



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Table of Contents

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Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Executive Summary

Governmental accounting requirements and purpose of this report

The Governmental Accounting Standards Board Statements No. 67 and No. 68 require trusts (GASB 67) and employers (GASB 68) to accrue the cost associated with pension benefits while eligible employees are providing services to the employer. The purpose of this actuarial valuation report is to provide the Lansing Board of Water and Light (the "Board") with:

- 1) The amount of accrued liability related to the Board's pension plan (Total Pension Liability) using the most recent census data and discount rate;
- 2) The funded status of the plan;
- 3) The actuarial determined contribution; and
- 4) The GASB 67/68 expense and disclosure information needed to fulfill the Board's financial reporting requirements for the current fiscal year.

Key measures for the prior and current fiscal years		6/30/2018		6/30/2019
Active participants Terminated vested participants Retired, disabled and surviving participants		8 4 <u>352</u> 264		5 3 <u>337</u> 245
Total	•	364	•	345
Present value of future benefits (PVFB)	\$	56,006,126	\$	54,004,187
Total pension liability (TPL)	\$	55,750,503	\$	53,826,119
Fiduciary net position (FNP)	\$	62,366,985	\$	60,421,846
Net pension liability (NPL)	\$	(6,616,482)	\$	(6,595,727)
Funded status		111.87%		112.25%
Pension expense	\$	449,142	\$	1,615,812
Actuarially determined contribution	\$	0	\$	0
Key assumptions				
Census date		2/28/2018		2/28/2019
Valuation date		2/28/2018		2/28/2019
Measurement date		6/30/2018		6/30/2019
Discount rate		7.00%		7.00%
Expected long term rate of return on plan assets		7.00%		7.00%
Actuarial cost method	En	try Age Normal	En	try Age Normal



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Executive Summary (continued)

Discount rate

Pursuant to GASB 67/68, projected benefit payments are required to be discounted to their actuarial present value using a Single Discount Rate that reflects (1) a long-term expected rate of return on plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA/Aa credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on plan investments is 7.00%; the municipal bond rate is 3.50% (based on the daily rate closest to but not later than the measurement date of the Bond Buyer "20-Bond GO Index"); and the resulting Single Discount Rate is 7.00%.

The plan's fiduciary net position was projected to cover all future pension benefit payments. Therefore, we determined the discount rate to be the long-term expected rate of return on plan investments.

Assumption and method changes from the prior year

The mortality table was changed to the PUB-2010 General Mortality Table, Male and Female, projected generationally using the MP-2018 projection scale.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Actuarial Certification

July 12, 2019

This report presents actuarial and accounting results related to the Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions (the "Plan"). The results herein were prepared pursuant to Governmental Accounting Standards Board Statements 67 and 68 ("GASB 67/68").

The primary purpose of this report is to provide financial statement information pursuant to GASB 67/68 for the fiscal year ending June 30, 2019. The results of our calculations are set forth in this report, as are the actuarial assumptions and methods and a brief summary of the eligibility criteria and benefits for retirees.

To the best of our knowledge, the information supplied in this report is complete and accurate. The analysis and calculations were conducted in a manner consistent with the Standards of Professional Conduct, Qualifications, and Practice of the American Academy of Actuaries and consistent with the standards of practice of the Actuarial Standards Board.

All costs, liabilities, rates of interest, and other factors under the Plan have been determined on the basis of actuarial assumptions and methods which are reasonable and consistent with our understanding of GASB 67/68. All assumptions have been discussed with Lansing Board of Water and Light and appear to represent the best estimate of anticipated experience under the Plan. In preparing this report we relied on the census data, plan provisions, and other plan financial information provided by the Lansing Board of Water and Light. Actuarial computations under GASB 67/68 are for purposes of fulfilling employer financial accounting requirements. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results contained in this report.

Respectfully Submitted,

ah W Mille

Mark W. Miller, ASA, EA, MAAA, FCA Benassist Retirement Consulting, LLC



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Summary of Key Results

	6/30/2018	6/30/2019
Census data summary		
Active participants	8	5
Terminated vested participants	4	3
Retired, disabled and surviving participants	 352	 337
Total	364	345
Covered payroll	\$ 603,382	\$ 405,694
Present value of future benefits (PVFB)		
Active participants	\$ 3,088,087	\$ 2,179,148
Terminated vested participants	\$ 357,282	283,757
Retired, disabled and surviving participants	 52,560,757	 51,541,282
Total	\$ 56,006,126	\$ 54,004,187
Present value of future normal costs (PVFNC)	\$ 247,355	\$ 178,068
Total pension liability (TPL)		
Active participants	\$ 2,832,464	\$ 2,001,080
Terminated vested participants	\$ 357,282	283,757
Retired, disabled and surviving participants	 52,560,757	 51,541,282
Total	\$ 55,750,503	\$ 53,826,119
Fiduciary net position (FNP)	\$ 62,366,985	\$ 60,421,846
Net pension liability (NPL)	\$ (6,616,482)	\$ (6,595,727)
Funded status	111.87%	112.25%
Pension expense	\$ 449,142	\$ 1,615,812
Contribution		
Actuarially determined contribution	\$ 0	\$ 0
Actuarially determined contribution as a % of covered payroll	0.00%	0.00%



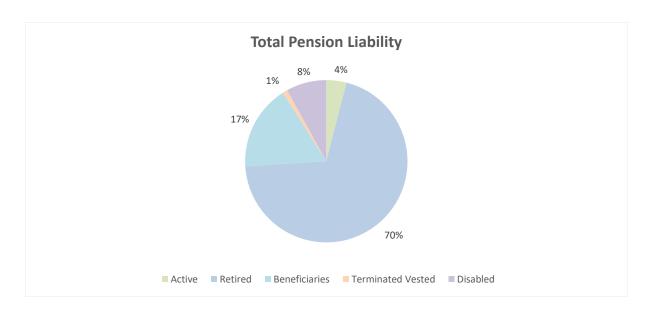
Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Present Value of Future Benefits



	6/30/2018	6/30/2019
Present value of future benefits		
Active participants	\$ 3,088,087	\$ 2,179,148
Inactive participants		
Retired	\$ 38,332,933	\$ 37,973,624
Beneficiaries	9,624,384	9,112,226
Disabled	4,603,440	4,455,432
Terminated vested	 357,282	 283,757
Total inactive	52,918,039	51,825,039
Total	\$ 56,006,126	\$ 54,004,187
Fiduciary net position (FNP)	\$ 62,366,985	\$ 60,421,846
Unfunded present value of future benefits (surplus)	\$ (6,360,859)	\$ (6,417,659)



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Total Pension Liability



	6/30/2018	6/30/2019
Total pension liability		
Active participants	\$ 2,832,464	\$ 2,001,080
Inactive participants		
Retired	\$ 38,332,933	\$ 37,973,624
Beneficiaries	9,624,384	9,112,226
Disabled	4,603,440	4,455,432
Terminated vested	 357,282	 283,757
Total inactive	52,918,039	51,825,039
Total	\$ 55,750,503	\$ 53,826,119
Fiduciary net position (FNP)	\$ 62,366,985	\$ 60,421,846
Net pension liability (NPL)	\$ (6,616,482)	\$ (6,595,727)
Service cost	\$ 56,512	\$ 39,592



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Statement of Fiduciary Net Position

	6/30/2018	6/30/2019
Assets		
Cash and deposits	\$ 1,890,701	\$ 1,963,325
Receivables		
Contributions	0	0
Due from broker for investments sold	11,853	0
Net receivable on investments	 148,763	 85,635
Total receivables	\$ 160,616	\$ 85,635
Investments		
U.S. government and agencies	7,966,488	4,873,353
Corporate bonds and notes	12,372,866	6,379,674
U.S. common stocks	13,225,315	7,512,850
Common collective fund - other	0	6,029,465
Mutual funds	26,341,508	30,566,813
Real estate	 409,491	 3,016,974
Total investments	\$ 60,315,668	\$ 58,379,129
Total assets	\$ 62,366,985	\$ 60,428,089
Liabilities		
Payables:		
Investment management fees	\$ 0	\$ 0
Due to broker for investments purchased	 0	 (6,243)
Total payables	\$ 0	\$ (6,243)
Total liabilities	\$ 0	\$ (6,243)
Net position restricted for pensions	\$ 62,366,985	\$ 60,421,846

Investment Policy - A detailed description of the investment policy for the plan can be found in the Lansing Board of Water and Light Defined Benefit Plan for Employees" Pensions Statement of Investment Policies, Procedures and Objectives.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Statement of Changes in Fiduciary Net Position

		6/30/2018	6/30/2019
Additions			
Contributions			
Employer	\$	0	\$ 0
Employee	. <u> </u>	0	 0
Total contributions	\$	0	\$ 0
Investment income			
Net increase in fair value of investments	\$	1,521,207	\$ 2,540,531
Interest and dividends		1,590,883	1,840,190
Less investment expense		0	 0
Net investment income	\$	3,112,090	\$ 4,380,721
Total additions	\$	3,112,090	\$ 4,380,721
Deductions			
Benefit payments	\$	(6,413,954)	\$ (6,142,622)
Administrative expenses		(254,964)	 (183,238)
Total deductions	\$	(6,668,918)	\$ (6,325,860)
Net increase in net position	\$	(3,556,828)	\$ (1,945,139)
Net position restricted for pensions			
Beginning of year	\$	65,923,813	\$ 62,366,985
End of year	<u>\$</u>	62,366,985	\$ 60,421,846



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Changes in the Net Pension Liability

	Increase (Decrease)								
	Total Pension Liability (a)		Fiduciary Net Position (b)			Net Pension Liability (a)-(b)			
Balances at 6/30/2018	\$	55,750,503	\$	62,366,985	\$	(6,616,482)			
Changes for the year									
Service cost		60,468		0		60,468			
Interest		3,691,180		0		3,691,180			
Change of benefit terms		0		0		0			
Differences between expected and actual experience		(743,020)		0		(743,020)			
Change in assumptions and other inputs		1,209,610		0		1,209,610			
Contributions - employer		0		0		0			
Contributions - retiree		0		0		0			
Net investment income		0		4,380,721		(4,380,721)			
Benefit payments and refunds of employee contributions		(6,142,622)		(6,142,622)		0			
Administrative expense		0		(183,238)		183,238			
Other changes		0		0		0			
Net changes	\$	(1,924,384)	\$	(1,945,139)	\$	20,755			
Balances at 6/30/2019	\$	53,826,119	\$	60,421,846	\$	(6,595,727)			

<u>Notes</u>

The Net Pension Liability (NPL) is equal to the Total Pension Liability (TPL) minus the Fiduciary Net Position (FNP), or market value of assets. Pension Expense includes amounts for: service cost, interest on the TPL, changes in the benefit structure, recognition of increases/decreases in liability due to actual vs. expected experience, actuarial assumption changes, investment gains/losses on the market value of assets and expected return on plan assets. The impact of actual experience and assumption changes are recognized over the average expected remaining service life of the plan participants, while investment gains/losses are recognized equally over five years.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report

Schedule of Changes in the Net Pension Liability

		6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015	6/30/2014
Total pension liability							
Service cost	\$	60,468	\$ 50,072	\$ 112,672	\$ 223,219	\$ 274,052	\$ 348,952
Interest		3,691,180	4,030,924	4,316,565	4,625,283	4,919,427	4,751,843
Change of benefit terms		0	0	0	0	0	0
Difference between expected and actual experience		(743,020)	(229,751)	(383,137)	299,179	(1,093,705)	964,016
Change in assumptions and other inputs		1,209,610	1,418,554	(856,662)	(1,469,174)	0	4,538,152
Benefit payments		(6,142,622)	(6,413,954)	(7,472,625)	(7,895,767)	(8,045,948)	(8,541,275)
Refunds of contributions		0	 0	 0	 0	 0	 0
Net change in total pension liability		(1,924,384)	\$ (1,144,155)	\$ (4,283,187)	\$ ()))	\$ (-,,	\$ 2,061,688
Total pension liability - beginning	-	55,750,503	 56,894,658	 61,177,845	 65,395,105	 69,341,279	 67,279,591
Total pension liability - ending (a)	\$	53,826,119	\$ 55,750,503	\$ 56,894,658	\$ 61,177,845	\$ 65,395,105	\$ 69,341,279
Fiduciary net position							
Contributions - employer	\$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Contributions - non-employer		0	0	0	0	0	0
Contributions - member		0	0	0	0	0	0
Net investment income		4,380,721	3,112,090	8,271,674	46,762	1,771,424	14,243,164
Benefit payments		(6,142,622)	(6,413,954)	(7,472,625)	(7,895,767)	(8,045,948)	(8,541,275)
Administrative expense		(183,238)	(254,964)	(317,071)	(388,495)	(576,122)	(595,925)
Refunds of contributions		0	0	0	0	0	0
Other		0	 0	 0	 0	 0	 0
Net change in fiduciary net position		(1,945,139)	(3,556,828)	481,978	(8,237,500)	(6,850,646)	5,105,964
Fiduciary net position - beginning		62,366,985	 65,923,813	 65,441,835	 73,679,335	 80,529,981	 75,424,017
Fiduciary net position - ending (b)	\$	60,421,846	\$ 62,366,985	\$ 65,923,813	\$ 65,441,835	\$ 73,679,335	\$ 80,529,981
Net pension liability - ending (a)-(b)	\$	<u>(6,595,727)</u>	\$ (6,616,482)	\$ (9,029,155)	\$ (4,263,990)	\$ (8,284,230)	\$ (11,188,702)
Plan fiduciary net position as a percentage of the total pension liability		112.25%	111.87%	115.87%	106.97%	112.67%	116.14%
Covered payroll		405,694	603,382	586,181	771,810	1,017,849	1,224,727
Net pension liability as a percentage of covered payroll		-1625.79%	-1096.57%	-1540.34%	-552.47%	-813.90%	-913.57%



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Development of Net Pension Liability (Gain) / Loss

		6/30/2018	6/30/2019
Total pension liability			
Total pension liability at BOY	\$	56,894,658	\$ 55,750,503
Service cost		50,072	60,468
Benefit payments		(6,413,954)	(6,142,622)
Expected interest		4,030,924	3,691,180
Assumption change		1,418,554	 1,209,610
Expected total pension liability at EOY		55,980,254	54,569,139
Actual total pension liability at EOY		55,750,503	53,826,119
Total pension liability (gain) / loss	\$	(229,751)	\$ (743,020)
Fiduciary net position			
Fiduciary net position at BOY	\$	65,923,813	\$ 62,366,985
Employer contributions		0	0
Employee contributions		0	0
Benefit payments		(6,413,954)	(6,142,622)
Administrative expenses		(254,964)	(183,238)
Expected net investment income		4,698,723	 4,148,028
Expected fiduciary net position at EOY		63,953,618	60,189,153
Actual fiduciary net position at EOY	\$	62,366,985	60,421,846
Fiduciary net position (gain) / loss	\$	1,586,633	\$ (232,693)
Net pension liability (gain) / loss	<u>\$</u>	1,356,882	\$ (975,713)

<u>Note</u>

Notes for the fiscal years shown above are provided on page 14.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Notes to Schedule of Changes in the Net Pension Liability

June 30, 2019

- Difference between actual and expected experience The \$.74MM gain on the Total Pension Liability for the fiscal year ending June 30, 2019 is primarily attributable to participant deaths.
- Assumption change The plan experienced a \$1.21MM loss due to the change of the mortality assumption from the RP-2014 Total Dataset Mortality adjusted to 2006 and projected generationally using the MP-2017 improvement scale to the PUB-2010 General Employees Mortality, projected generationally using the MP-2018 improvement scale.
- Investment loss The plan experienced a \$.23MM gain on plan assets during the fiscal year ending 6/30/2019 due to the actual return on assets equaling 7.39% vs. an expected return of 7.00%.

June 30, 2018

- Difference between actual and expected experience The \$230,000 gain on the Total Pension Liability for the fiscal year ending June 30, 2018 is primarily attributable to participant deaths.
- Assumption change Assumptions for the discount rate and expected return on assets were decreased from 7.50% to 7.00% to reflect the expected long term rate of return on the trust.
- Investment loss During the fiscal year ending 6/30/2018 the actual return on assets was 4.97% vs. an
 expected return of 7.50%.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Sensitivity Analysis

Sensitivity of the net pension liability to changes in the discount rate - The following presents the net pension liability, calculated using the discount rate of 7.0%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower (6.0%) or 1-percentage point higher (8.0%) than the current rate:

	 1% Decrease (6.0%)	Current Discount Rate (7.0%)	 1% Increase (8.0%)
Net pension liability (asset)	\$ (1,697,353)	\$ (6,595,727)	\$ (9,364,768)



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report

Pension Expense

	6/30/2018	6/30/2019
Service cost with interest	\$ 50,072	\$ 60,468
Interest on the total pension liability	4,030,924	3,691,180
Change of benefit terms	0	0
Expensed portion of current-period difference between expected and actual experience in the total pension liability	(229,751)	(743,020)
Expensed portion of current-period changes in assumptions	1,418,554	1,209,610
Expensed portion of current-period difference between expected and actual earnings on plan investments	317,327	(46,539)
Employee contributions	0	0
Expected earnings on pension plan investments	(4,698,723)	(4,148,028)
Administrative expenses	254,964	183,238
Recognition of deferred inflows	(2,516,930)	(731,130)
Recognition of deferred outflows	 1,822,705	 2,140,033
Pension expense	\$ 449,142	\$ 1,615,812
Census date	2/28/2018	2/28/2019
Measurement date	6/30/2018	6/30/2019
Reporting date	6/30/2018	6/30/2019
Discount rate	7.00%	7.00%
Expected return on assets	7.00%	7.00%



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Deferred Inflows and Outflows

The following table provides a summary of the deferred inflows and outflows as of 6/30/2019.

	Deferred Outflows of Resources			ferred Inflows f Resources
Differences between expected and actual experience	\$	0	\$	0
Changes of assumptions or other inputs		0		0
Net difference between projected and actual earnings on plan investments		1,985,683		(1,648,414)
Total	\$	1,985,683	\$	(1,648,414)

Collective amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future years as follows:

Year Ended June 30	Deferred Outflows of Resources		erred Inflows Resources
2020	\$	1,351,031	\$ (777,669)
2021		317,327	(777,669)
2022		317,325	(46,539)
2023		0	(46,537)
2024		0	0
Thereafter		0	0



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report

Amortization Schedule

Date Established	Description		Initial Amount	(Outstanding Balance	Years Remaining		2019 Installment
6/30/2017	Actuarial (Gain)/Loss	\$	(383,137)	\$	0	0.00	\$	0
6/30/2018	Actuarial (Gain)/Loss		(229,751)		0	0.00		-
6/30/2019	Actuarial (Gain)/Loss		(743,020)		0	0.00		(743,020)
Total				\$	0		\$	(743,020)
6/30/2017	Assumption Change	\$	(856,662)	\$	0	0.00	\$	0
6/30/2018	Assumption Change		1,418,554		0	0.00		-
6/30/2019	Assumption Change		1,209,610		0	0.00		1,209,610
Total				\$	0		\$	1,209,610
6/30/2014	Investment (Cain)/Less	\$	(8.020.008)	\$	0	0.00	\$	0
6/30/2014	Investment (Gain)/Loss	φ	(8,929,008) 3,944,996	φ	0	0.00	φ	•
6/30/2015	Investment (Gain)/Loss				· ·	1.00		789,000
	Investment (Gain)/Loss		5,168,528		1,033,704			1,033,706
6/30/2017	Investment (Gain)/Loss		(3,655,650)		(1,462,260)	2.00		(731,130)
6/30/2018	Investment (Gain)/Loss		1,586,633		951,979	3.00		317,327
6/30/2019	Investment (Gain)/Loss		(232,693)		(186,154)	4.00		(46,539)
Total				\$	337,269		\$	1,362,364



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Rate of Return

The long-term expected rate of return on plan investments was determined using a building-block method where expected future real rates of return (expected returns, net of plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2019 are summarized in the following table:

Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return
Core bonds	20.00%	2.62%
Multi-sector	10.00%	3.49%
Liquid absolute return	10.00%	3.75%
U.S. large cap equity	25.00%	7.21%
U.S. small cap equity	10.00%	8.42%
Non-U.S. equity	20.00%	8.34%
Core real estate	5.00%	6.78%
Total	100.00%	

<u>Notes</u>

(1) The amounts shown above were provided ACG Asset Consulting Group.

(2) The Long-Term Expected Real Rate of Return equals the Long-Term Arithmetic Average Nominal Return minus an average annual inflation rate of 2.75%.

(3) The long-term expected rate of return for the June 30, 2019 measurement date is 7.00%.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Actuarially Determined Contribution

		FYE 6/30/2019	FYE 6/30/2020
Normal cost	\$	87,515	\$ 57,927
Actuarial accrued liability (beginning of year)		54,573,155	52,703,906
Actuarial value of assets (beginning of year)		64,818,727	61,382,424
Unfunded actuarial accrued liability		(10,245,572)	(8,678,518)
Net amortization charges / (credits)		(1,079,714)	(914,572)
Administrative expenses		264,000	201,000
Actuarially determined contribution (beginning of year)	\$	0	\$ 0
Covered payroll	\$	603,382	\$ 405,707
Percentage of covered payroll		0.00%	0.00%
Discount rate		7.50%	7.50%
Amortization period		15 Years	15 Years
		Closed	Closed

<u>Notes</u>

(1) Administrative expenses are assumed to equal the expenses for the prior year rounded up to the next \$1,000.

(2) Disclosure of the actuarial methods and assumptions to develop the Actuarially Determined Contribution for the fiscal year ending June 30, 2020 can be found in the Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions February 28, 2019 Actuarial Valuation for Funding Purposes dated June 17, 2019.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Schedule of Contributions

	FYE 2019	FYE 2018	FYE 2017	17 FYE 2016		FYE 2015 FYE 2014		FYE 2013		FYE 2012		FYE 2011		FYE 2010		
Actuarially determined employer contribution	\$ 0	\$ 0	\$ 0	\$	0	\$	0	\$ 0	\$	0	\$	85,652	\$ 2,1	09,167	\$	0
Actual employer contributions	\$ 0	\$ 0	\$ 0	\$	0	\$	0	\$ 0	\$	0	\$	85,652	\$ 2,1	09,167	\$	0
Annual contribution deficiency (excess)	\$ 0	\$ 0	\$ 0	\$	0	\$	0	\$ 0	\$	0	\$	0	\$	0	\$	0
Covered payroll	\$ 603,382	\$ 586,181	\$ 771,810	\$	1,017,849	\$	1,224,727	\$ 1,683,696	\$	2,101,442	\$	2,397,921	\$ 2,6	59,851	\$:	3,089,358
Actual contributions as a percentage of covered payroll	0.00%	0.00%	0.00%		0.00%		0.00%	0.00%		0.00%		3.57%		79.30%		0.00%

June 30, 2019 GASB 67/68 Report

Actuarial Assumptions and Methods Used for Funding Policy

The following actuarial methods and assumptions were used in the February 28, 2019 funding valuation. Please see that valuation report dated June 17, 2019 for further details.

Actuarial Cost Method - Individual entry age normal.

Amortization Method - 15 year closed level dollar amortization of Unfunded Actuarial Accrued Liability.

Asset Valuation Method - The Actuarial Value of Assets is equal to the Market Value of Assets plus a five year smoothing of gains and losses on the Market Value of Assets, subject to a 20% corridor around the Market Value of Assets.

Inflation Rate - 2.50% per year.

Salary Increase Rate - 3.50% per year.

Discount Rate and Expected Long-Term Rate of Return on Investments - 7.50% per year.

Retirement Rates - See Table A on page 28.

Mortality Rates - PUB-2010 General Employees Mortality, Male and Female, projected generationally using the MP-2018 improvement scale.

Disability Rates - 1985 Pension Disability Incident Class 1 rates for males and females. See table of sample rates in Table B on page 28.

Termination Rates - None assumed.

Expenses - Administrative expenses are assumed to equal the expenses for the prior year rounded up to the next \$1,000.

Benefit Commencement Age for Deferred Vested Participants - Age 65.

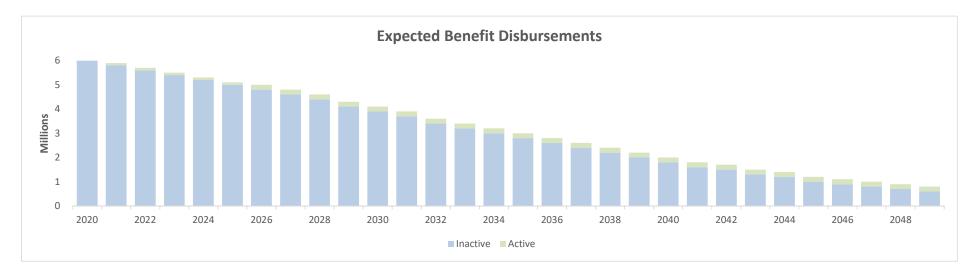
Spouse Assumptions - (1) 100% of the male participants are assumed to be married with the spouse assumed to be 3 years younger; (2) 100% of the female participants are assumed to be married with the spouse assumed to be 3 years older.

Form of Payment - All active participants are assumed to elect a 100% joint and survivor annuity.

Assumption and Method Changes from Prior Year - The mortality table and improvement scale were updated to the PUB-2010 General Employees Mortality Table and the MP-2018 improvement scale.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Expected Benefit Disbursements



FYE	Inactive	Active	Total	FYE	Inactive	Active	Total	FYE	Inactive	Active	Total
2020	\$ 5,999,570	\$ 30,355 \$	6,029,925	2030 \$	3,895,871 \$	208,968 \$	4,104,839	2040 \$	5 1,794,116	\$ 236,101 \$	2,030,217
2021	5,815,477	56,273	5,871,750	2031	3,669,004	216,711	3,885,715	2041	1,619,061	233,765	1,852,826
2022	5,621,647	79,088	5,700,735	2032	3,443,743	223,809	3,667,552	2042	1,453,384	230,996	1,684,380
2023	5,421,305	102,407	5,523,712	2033	3,220,852	229,334	3,450,186	2043	1,297,622	227,742	1,525,364
2024	5,214,912	123,367	5,338,279	2034	3,001,100	234,550	3,235,650	2044	1,152,164	223,955	1,376,119
2025	5,005,563	137,832	5,143,395	2035	2,785,299	238,161	3,023,460	2045	1,017,263	219,590	1,236,853
2026	4,795,259	153,458	4,948,717	2036	2,574,239	240,134	2,814,373	2046	893,018	214,610	1,107,628
2027	4,578,034	168,756	4,746,790	2037	2,368,759	240,994	2,609,753	2047	779,397	208,993	988,390
2028	4,351,268	184,363	4,535,631	2038	2,169,707	239,669	2,409,376	2048	676,233	202,726	878,959
2029	4,123,574	198,997	4,322,571	2039	1,977,899	238,053	2,215,952	2049	583,240	195,807	779,047



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Census Data Summary

2/28/2018 2/28/2019 Number of participants Active 8 5 3 Terminated vested 4 Retired 201 193 Beneficiaries 120 114 Disabled 31 30 Total 364 345 Active demographics Average age 58.3 57.6 30.2 31.8 Average past service Average future service 5.3 4.8 Average compensation \$ 75,423 81,139 \$ \$ Covered payroll 603,382 \$ 405,694 Average monthly accrued benefit \$ 3,296 3,728 \$ Total monthly accrued benefits \$ 26,371 \$ 18,638 **Terminated vested demographics** 56.7 Average age 56.6 Average monthly accrued benefit \$ 982 \$ 1,042 Total monthly accrued benefits \$ 3,928 \$ 3,125 **Retiree demographics** Average age 77.5 77.5 Average monthly accrued benefit \$ 1,900 1,868 \$ Total monthly accrued benefits \$ \$ 375,416 366,640 **Beneficiary demographics** 81.6 Average age 81.0 Average monthly accrued benefit 948 \$ 971 \$ Total monthly accrued benefits \$ 116,520 108,019 \$ **Disabled demographics** 70.9 72.0 Average age 1,230 Average monthly accrued benefit \$ 1,228 \$ Total monthly accrued benefits \$ \$ 38,065 36,892



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Age & Service Distribution - Active Participants

Years of Service Attained Under 40 & Over Age 1 1 to 4 5 to 9 10 to 14 15 to 19 20 to 24 25 to 29 30 to 34 35 to 39 Total Under 25 0 25 to 29 0 30 to 34 0 35 to 39 0 40 to 44 0 45 to 49 0 50 to 54 0 55 to 59 1 3 1 1 60 to 64 0 65 to 69 2 1 1 70+ 0 Total 0 0 0 0 2 0 5 0 1 1 1



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Census Data Reconciliation

		Term				
	Active	Vested	Retired	Benef	Disabled	Total
February 28, 2018	8	4	201	120	31	364
Vested terminations	0	0	0	0	0	0
Retirements	(3)	(1)	4	0	0	0
Disabled	0	0	0	0	0	0
Death with survivor	0	0	(6)	6	0	0
Death without survivor	0	0	(6)	(12)	(1)	(19)
New entrants	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Data corrections	0	0	0	0	0	0
February 28, 2019	5	3	193	114	30	345



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Summary of Assumptions and Methods

Cost Method - Individual entry age normal level percent of salary.

Dates of Calculations Actuarial valuation date: February 28, 2019 Census date: February 28, 2019 Measurement date GASB 74 and GASB 75: June 30, 2019 Reporting date GASB 74 and GASB 75: June 30, 2019

Employees Included in the Calculations - All active employees who are eligible to receive pension benefits as a retiree. Retired, disabled, beneficiaries and terminated vested participants who are receiving benefits or entitled to receive benefits in the future.

Source of Data - Data is as of the valuation date and was supplied by the Lansing Board of Water and Light. While we have not audited this data, we believe the census data and financial information to be accurate and complete.

Discount Rate - Pursuant to GASB 67/68, projected benefit payments are required to be discounted to their actuarial present value using a Single Discount Rate that reflects (1) a long-term expected rate of return on plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA/Aa credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on plan investments is 7.00%; the municipal bond rate is 3.50% (based on the daily rate closest to but not later than the measurement date of the Bond Buyer "20-Bond GO Index"); and the resulting Single Discount Rate is 7.00%.

The plan's fiduciary net position was projected to cover all future pension benefit payments. Therefore, we determined the discount rate to be the long-term expected rate of return on plan investments.

Inflation Rate - 3.00% per year.

Salary Increase Rate - 3.5% per year.

Mortality Rates - Pre and Post retirement - PUB-2010 General Employees Mortality, Male and Female, projected generationally using the MP-2018 improvement scale.

Retirement Rates - Sample rates are listed on Table A herein.

Termination Rates - None assumed.

Disability Rates - The 1985 Pension Disability Incidence Class 1 rates for males and females. Sample rates are listed on Table B herein.

Expenses - Administrative expenses are assumed to equal the expenses for the prior year rounded up to the next \$1,000.

Benefit Commencement Age for Deferred Vested Participants - Age 65.

Spouse Assumptions - (1) 100% of the male participants are assumed to be married with the spouse assumed to be 3 years younger; (2) 100% of the female participants are assumed to be married with the spouse assumed to be 3 years older.

Form of Payment - All active participants are assumed to elect a 100% joint and survivor annuity.

Assumption and Method Changes from Prior Year - The mortality table was changed to the PUB-2010 General Mortality Table, Male and Female, and the improvement scale was updated to the MP-2018 improvement scale.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Summary of Assumptions and Methods (continued)

Table A - Retirement Rates

Age	Rate	Age	Rate
50	4.00%	61	14.00%
51	4.00%	62	25.00%
52	8.00%	63	25.00%
53	4.00%	64	20.00%
54	10.00%	65	25.00%
55	5.00%	66	25.00%
56	8.00%	67	33.00%
57	10.00%	68	33.00%
58	12.00%	69	50.00%
59	14.00%	70	100.00%
60	10.00%		

Table B - Disability Rates

Age	Male	Female
20	0.03%	0.03%
25	0.04%	0.05%
30	0.05%	0.08%
40	0.12%	0.21%
50	0.36%	0.53%
55	0.72%	0.95%
60	1.26%	1.16%



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Summary of Plan Provisions

Effective Date and Plan Year – The most recent effective date is July 1, 2010. The plan year is from July 1 through June 30.

Participation and Eligibility - Eligible employees are those who were participating in the plan on December 31, 1996 and who elected to remain in the plan as of December 1, 1997.

Employer Contributions - The employer contributes the entire cost of the Plan. Participant contributions are not required.

Pension Service Credit - Service is credited on an elapsed time basis.

Annual Pay - Annual pay equals the base pay plus bonus received during the year in which the base pay was the highest within the last ten years of employment.

Normal Retirement Date - The normal retirement date for employees hired prior to July 1, 1990 is the earlier of (1) the first day of the month on or after attainment of age 60, and (2) the first day of the month on or after completion of 30 years of Pension Service Credit and attainment of age 55. If an employee who was hired before July 1, 1990 terminates employment after attainment of age 45 and completion of 25 years of Pension Service Credit, the normal retirement date is the first day of the month on or after the date he has attained age 55 and would have completed 30 years of Pension Service Credit if he had remained employed.

For employees hired after July 1, 1990, the normal retirement date is the first day of the month on or after attainment of age 65.

Normal Retirement Benefit - 1.8% of Annual Pay multiplied by the Pension Service Credit and payable as a life annuity.

Early Retirement Date - A reduced early retirement benefit is payable during the 10 years prior to a participant's Normal Retirement Date upon completion of 25 years of Pension Service Credit or 5 years prior to a participant's normal retirement date upon completion of 15 years of Pension Service Credit.

Early Retirement Benefit - The Normal Retirement Benefit is reduced 0.25% per month for the first 60 months and then reduced 0.4167% per month for the next 60 months.

Disability Retirement Benefit - A disability benefit is payable upon disability after completion of at least 10 years of service. The disability benefit is equal to the Normal Retirement Benefit accrued as of the date of disability and is payable immediately. The disability benefit is offset for any workers' compensation payments.

Deferred Vested Benefit - If a participant terminates employment for any reason other than death or disability prior to his or her Normal or Early Retirement Date, and if the participant has completed at least three (3) years service on his or her date of termination of employment, then the participant will become vested in his or her accrued Normal Retirement Benefit subject to a 7 year graded vesting schedule.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Summary of Plan Provisions (continued)

Death in Service Benefit - If a vested employee dies while still an employee and has a spouse, the Board will assume that the employee retired on the day preceding his or her death on a disability pension and elected a 100% Joint and Survivor form of payment.

Forms of Payment - The following actuarially equivalent forms of payment are available under the plan: a) a monthly benefit payable for the participant's lifetime;

- b) a monthly benefit payable for the participant's lifetime with 15% up to 100% of such benefit continued to a surviving contingent annuitant following the participant's death;
- a monthly benefit payable for the participant's lifetime with 15% up to 100% of such benefit continued to a surviving contingent annuitant following the participant's death. If the beneficiary dies first, the pension amount will revert back to the life annuity amount;
- d) a lump sum payment

Cost of Living Increases - None

Actuarial Equivalence - The plan's definition of Actuarial Equivalence is as follows:

- a) Non-decreasing annuities: Actuarial Equivalence is computed using the 1983 Group Annuity Mortality Table applied on a unisex basis and 7.50% interest.
- b) Accelerated forms of payments: Actuarial Equivalence is computed using the 1983 Group Annuity Mortality Table applied on a unisex basis and the annual rate of interest on a 30 year constant maturity U.S. Treasury securities for the month of December immediately preceding the start of the calendar year in which distribution occurs.

Maximum Compensation - Annual Pay for any 12-month period used to determine a participant's accrued benefit may not exceed the limits in IRC Section 401(a)(17) for the calendar year in which the 12-month period begins.

Maximum Benefit - Annual benefit amounts payable under the plan may not exceed the limits in IRC Section 415.

Changes in Plan Provisions Since Last Valuation - None.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report

Glossary

Actuarial Assumptions - Assumptions relating to future experience under the plan. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- · future rates of investment earnings and future investment and administrative expenses;
- · characteristics of members not specified in the data, such as marital status;
- · characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method - A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Total Pension Liability (TPL).

Actuarial (Gain) or Loss - A measure of the difference between actual experience and experience expected under a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings that have been forecasted. To the extent that actual experience differs from that assumed, actuarial accrued liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the plan's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent - Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV) - The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- adjusted for the probable financial effect of certain intervening events (such as changes in marital status, etc.)
- multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Benefits - The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future benefit increases. The Actuarial Present Value of Future Benefits includes the liabilities for active members, retired members and spouses receiving benefits. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Present Value of Future Earnings - The Actuarial Present Value of a participant's expected future earnings.

Actuarial Present Value of Future Normal Costs - The portion of the Actuarial Present Value of Future Benefits allocated to future years.



Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions June 30, 2019 GASB 67/68 Report Glossary (continued)

Actuarial Valuation - The determination, as of a valuation date, of the Normal Cost, Total Pension Liability (TPL), Fiduciary Net Position (FNP), and related Actuarial Present Values for a plan. An Actuarial valuation for a retirement system typically includes calculations that provide financial information for the plan, such as the funded status, unfunded actuarial accrued liability and the contribution amounts.

Actuarially Determined - Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Covered Payroll - Payroll as of the valuation date for active participants who have not attained normal retirement age.

Decrements - Those causes/events due to which a member's status (active-inactive-retiree-spouse) changes, that is: death, retirement, disability, or termination.

Entry Age Normal Cost Method - The EAN cost method is a standard actuarial funding method. The annual cost of benefits under EAN cost method is comprised of two components:

- Normal cost
- Amortization of the unfunded liability

The normal cost is determined on an individual basis, from a member's age at plan entry, and is designed to be a level percentage of pay throughout a member's career.

Fiduciary Net Position - The value of the plan's assets as of a given date, used by the actuary for valuation purposes. This usually equals the market value of plan assets.

Funded Status - The ratio of the Fiduciary Net Position (FNP) to the Total Pension Liability (TPL).

Net Pension Liability (NPL) - The excess of the Total Pension Liability (TPL) over the Fiduciary Net Position (FNP). This value may be negative in which case it may be expressed as a negative Fiduciary Net Position, also called the funding surplus.

Normal Cost - The portion of the Actuarial Present Value of Future Benefits allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an unfunded actuarial accrued liability is not part of Normal Cost. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

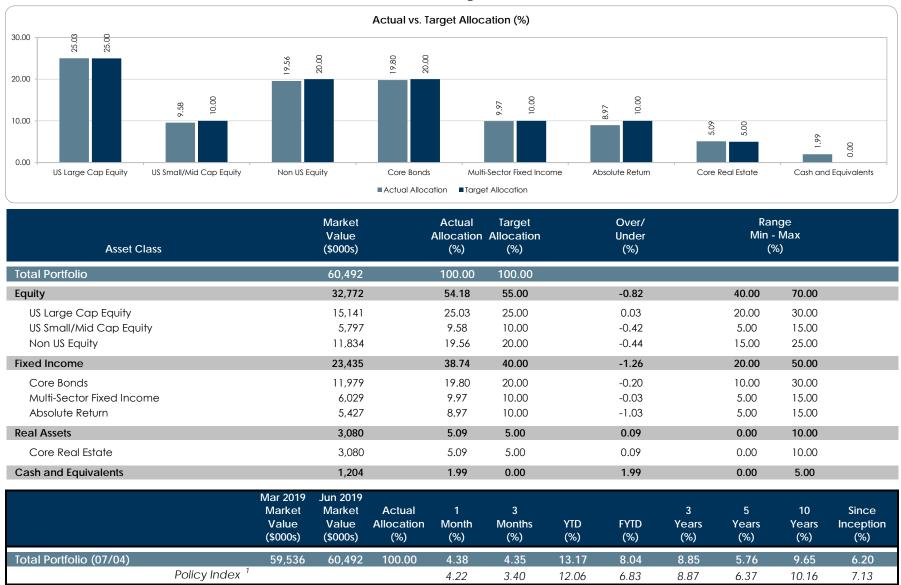
Total Pension Liability (TPL) - The portion of the Actuarial Present Value of Future Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Benefits minus the actuarial present value of future Normal Costs.

Valuation Date or Actuarial Valuation Date - The date on which the value of plan assets, the Actuarial Present Value of Future Benefits, the Total Pension Liability (TPL) and Normal Cost are determined. The expected future benefits are discounted to this date.



LBWL Defined Benefit Plan and Trust for Employees' Pensions

For the Periods Ending June 30, 2019



LBWL Defined Benefit Plan and Trust for Employees' Pensions

For the Periods Ending June 30, 2019

	Mar 2019 Market Value (\$000s)	Jun 2019 Market Value (\$000s)	Actual Allocation (%)	1 Month (%)	3 Months (%)	YTD (%)	FYTD (%)	3 Years (%)	5 Years (%)	10 Years (%)	Since Inception (%)
Total Portfolio (07/04)	59,536	60,492	100.00	4.38	4.35	13.17	8.04	8.85	5.76	9.65	6.20
Policy Index ¹				4.22	3.40	12.06	6.83	8.87	6.37	10.16	7.13
US Large Cap Equity (01/17) Russell 1000	14,480	15,141	25.03	7.43 7.02	4.58 4.25	19.28 18.84	12.00 10.02	 14.15	 10.45	 14.77	15.85 13.65
US Small/Mid Cap Equity (01/17) Blended Benchmark ²	5,780	5,797	9.58	7.05 7.09	9.23 2.96	26.92 19.25	13.61 1.82				9.96 6.02
Non US Equity (01/17) * MSCI EAFE	11,681	11,834	19.56	6.00 5.97	4.82 3.97	16.10 14.49	1.68 1.60	 9.65	 2.74	7.40	8.35 9.20
Fixed Income (01/17) BloomBar US Aggregate	23,419	23,435	38.74	1.55 1.26	3.16 3.08	6.80 6.11	7.60 7.87	 2.31	 2.95	 3.90	4.28 3.84
Real Assets (01/19) * NFI ODCE Net	3,043	3,080	5.09	1.22 0.78	1.22 0.78	2.67 1.99	 5.48	 6.61	 8.76	 8.87	2.67 1.99
Cash and Equivalents (01/17) US T-Bills 90 Day	1,134	1,204	1.99	0.18 0.21	0.52 0.64	1.04 1.24	2.04 2.31	 1.38	 0.87	 0.49	1.40 1.59

LBWL Defined Benefit Plan and Trust for Employees' Pensions

For the Periods Ending June 30, 2019

	Mar 2019 Market Value (\$000s)	Jun 2019 Market Value (\$000s)	Actual Allocation (%)	1 Month (%)	3 Months (%)	YTD (%)	FYTD (%)	3 Years (%)	5 Years (%)	10 Years (%)	Since Inception (%)
Equity (01/17)	31,940	32,772	54.18	6.89	5.62	19.67	8.70				12.62
US Large Cap Equity Loomis Sayles (01/13) Russell 1000 Growth	7,230	7,614	12.59	7.67 6.87	5.31 4.64	22.41 21.49	15.67 11.56	19.10 18.07	15.69 13.39	 16.28	16.82 16.24
Vanguard Russell 1000 Value (05/17) * Russell 1000 Value	7,249	7,527	12.44	7.18 7.18	3.83 3.84	16.19 16.24	8.43 8.46	 10.19	 7.46	 13.19	7.70 7.76
US Small/Mid Cap Equity Atlanta Capital (08/18) * Russell 2500	5,780	5,797	9.58	6.97 7.09	9.00 2.96	26.38 19.25	 1.77	 12.34	 7.66	 14.44	10.33 -0.16
Non US Equity Harding Loevner Int'l Equity (09/17) * MSCI ACWI ex US	5,805	5,962	9.86	6.28 6.07	4.45 3.22	16.57 13.99	0.69 1.80	 9.91	 2.65	 7.03	4.18 2.82
Lazard Int'l Equity (09/17) * MSCI EAFE	5,876	5,872	9.71	5.66 5.97	5.10 3.97	15.56 14.49	2.61 1.60	 9.65	 2.74	 7.40	3.38 3.26
Fixed Income (01/17)	23,419	23,435	38.74	1.55	3.16	6.80	7.60				4.28
Core Bonds JP Morgan Fixed Income (01/09) BloomBar US Aggregate	11,617	11,979	19.80	1.23 1.26	3.20 3.08	6.30 6.11	7.78 7.87	2.85 2.31	3.22 2.95	4.17 3.90	4.32 3.89
Multi-Sector Fixed Income Fidelity Tactical Bond (09/18) * BloomBar US Aggregate	5,828	6,029	9.97	1.88 1.26	3.37 3.08	8.76 6.11	 7.87	 2.31	 2.95	 3.90	7.88 7.15
Absolute Return BlackRock Strategic Income Opp (09/17) * BloomBar US Aggregate US T-Bills 90 Day + 3.0%	5,974	5,427	8.97	1.68 1.26 0.46	2.64 3.08 1.38	5.20 6.11 2.74	5.18 7.87 5.37	 2.31 4.42	 2.95 3.89	 3.90 3.50	3.36 3.25 4.95
Real Assets (01/19) *	3,043	3,080	5.09	1.22	1.22	2.67					2.67
Core Real Estate AEW Core Property Trust (01/19) * NFI ODCE Net	3,043	3,080	5.09	1.22 0.78	1.22 0.78	2.67 1.99	 5.48	6.61	 8.76	 8.87	2.67 1.99
Cash & Equivalents (01/17) Cash & Equivalents (01/17) US T-Bills 90 Day	1,134 1,134	1,204 1,204	1.99 1.99	0.18 0.18 0.21	0.52 0.52 0.64	1.04 1.04 1.24	2.04 2.04 2.31	 1.38	 0.87	 0.49	1.40 1.40 1.59

All returns prior to 12/31/2016 were calculated by the prior consultant.

* Net of Fee return data.

¹ Policy Index: Effective January 2019, the index consists of 25.0% Russell 1000, 10.0% Russell 2500, 20.0% MSCI ACWI ex US, 40.0% BloomBar US Aggregate, 5.0% NFI ODCE Net.

² Blended Benchmark: Effective August 2018, the index consists of 100% Russell 2500.

The Fiscal Year End is June.

Market Overview

For the Periods Ending June 30, 2019

	1 Month	3 Months	YTD	FYTD	3 Years	5 Years	10 Years
	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Equity Markets - Core							
S&P 500	7.05	4.30	18.54	10.42	14.19	10.71	14.70
Russell 1000	7.02	4.25	18.84	10.02	14.15	10.45	14.77
Russell 2000	7.07	2.10	16.98	-3.31	12.30	7.06	13.45
Russell 2500	7.09	2.96	19.25	1.77	12.34	7.66	14.44
Equity Markets - Growth							
S&P 500 Growth	6.17	4.56	20.19	12.02	17.26	13.09	16.10
Russell 1000 Growth	6.87	4.64	21.49	11.56	18.07	13.39	16.28
Russell 2000 Growth	7.70	2.75	20.36	-0.49	14.69	8.63	14.41
Russell 2500 Growth	7.78	4.14	23.92	6.13	16.14	9.98	15.67
Equity Markets - Value							
S&P 500 Value	8.08	4.02	16.70	8.67	10.64	7.92	13.10
Russell 1000 Value	7.18	3.84	16.24	8.46	10.19	7.46	13.19
Russell 2000 Value	6.37	1.38	13.47	-6.24	9.81	5.39	12.40
Russell 2500 Value	6.47	1.89	15.26	-1.92	8.98	5.55	13.28
International Markets							
MSCI ACWI	6.59	3.80	16.60	6.32	12.22	6.74	10.73
MSCI ACWI ex US	6.07	3.22	13.99	1.80	9.91	2.65	7.03
MSCI EAFE	5.97	3.97	14.49	1.60	9.65	2.74	7.40
MSCI EAFE Growth	6.52	5.96	18.87	4.67	10.12	4.79	8.63
MSCI EAFE Value	5.38	1.89	10.12	-1.48	9.11	0.63	6.10
MSCI Emerging Markets	6.32	0.74	10.76	1.61	11.07	2.87	6.17
MSCI World	6.63	4.20	17.38	6.94	12.39	7.20	11.33
MSCI World ex US	5.98	4.07	15.11	1.84	9.58	2.55	7.27
Fixed Income							
ICE BofA ML 1 Yr Treasury Note	0.39	0.93	1.75	2.97	1.43	1.02	0.76
ICE BofA ML High Yield Master II	2.42	2.55	10.12	7.56	7.53	4.69	9.22
BloomBar US Aggregate	1.26	3.08	6.11	7.87	2.31	2.95	3.90
BloomBar Intermediate G/C	1.07	2.59	4.97	6.93	1.99	2.39	3.24
BloomBar 10 Yr Municipal	0.37	2.15	5.36	7.63	2.63	3.81	4.95
BloomBar US Credit	2.26	4.27	9.35	10.34	3.74	3.92	5.77
Real Assets							
NFI ODCE Net	0.78	0.78	1.99	5.48	6.61	8.76	8.87

Total Portfolio

Dollar Reconciliation (\$000s)

For the Periods Ending June 30, 2019

	3 Months	FYTD	
Beginning Market Value	59,536	62,374	
Net Additions	-1,599	-6,495	
Return on Investment	2,555	4,613	
Ending Market Value	60,492	60,492	

Disclosures and Legal Notice

This report was prepared by ACG using information from sources that may include the following: client's custodian(s); client's investment manager(s); ACG Investment Manager Database and Client Reporting Tool; third party data vendors; and other outside sources as may be directed by the client. Index Characteristics utilized in this report are obtained from third party data providers and may be different than index characteristics reported by investment managers/funds due to varied calculation methodologies and data sources. Although the information presented herein has been obtained from and is based upon sources ACG believes to be reliable, no representation or warranty, express or implied, is made as to the accuracy or completeness of that information. Accordingly, ACG does not itself endorse or guarantee, and does not itself assume liability whatsoever for, the accuracy or reliability of any third party data or the financial information contained herein.

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Michigan Department of Treasury Form 5572 (2-19)

The Protecting Local Government Retirement and Benefits Act (PA 202 of 2017) & Public Act 530 of 2016 Pension Report

Enter Local Unit Name	LANSING CITY BOARD OF WATER & LIGHT	Instructions: For a list of detailed instructions on how to			
Enter Six-Digit Municode		complete and submit this form, visit			
Unit Type	Authority	michigan.gov/LocalRetirementReporting.			
Fiscal Year End Month	June				
Fiscal Year (four-digit year only, e.g. 2019)	2019				
Contact Name (Chief Administrative Officer)	Scott Taylor	Questions: For questions, please email			
Title if not CAO	Manager, Finance	LocalRetirementReporting@michigan.gov. Return this			
CAO (or designee) Email Address	SCOTT.TAYLOR@LBWL.COM	original Excel file. Do not submit a scanned image or PDF.			
Contact Telephone Number	517-702-6104				
Pension System Name (not division) 1	Defined Benefit Plan for Employees' Pensions	If your pension system is separated by divisions, you would			
Pension System Name (not division) 2		only enter one system. For example, one could have different			
Pension System Name (not division) 3		divisions of the same system for union and non-union			
Pension System Name (not division) 4		employees. However, these would be only one system and			
Pension System Name (not division) 5		should be reported as such on this form.			

Line	Descriptive Information	Source of Data	System 1	System 2	System 3	System 4	System 5
1	Is this unit a primary unit (County, Township, City, Village)?	Calculated	NO	NO	NO	NO	NO
2	Provide the name of your retirement pension system	Calculated from above	Defined Benefit Plan for				
2		calculated from above	Employees' Pensions				
3	Financial Information						
4	Enter retirement pension system's assets (system fiduciary net position ending)	Most Recent Audit Report	60,421,846				
5	Enter retirement pension system's liabilities (total pension liability ending)	Most Recent Audit Report	53,826,119				
6	Funded ratio	Calculated	112.3%				
7	Actuarially Determined Contribution (ADC)	Most Recent Audit Report	-				
8	Governmental Fund Revenues	Most Recent Audit Report	356,884,521				
9	All systems combined ADC/Governmental fund revenues	Calculated	0.0%				
10	Membership						
11	Indicate number of active members	Most Recent Actuarial Funding Valuation	5				
12	Indicate number of inactive members	Most Recent Actuarial Funding Valuation	3				
13	Indicate number of retirees and beneficiaries	Most Recent Actuarial Funding Valuation	337				
14	Investment Performance						
15	Enter actual rate of return - prior 1-year period	Most Recent Actuarial Funding Valuation or System					
15	5 Enter actual rate of return - prior 1-year period	Investment Provider	7.39%				
10	Enter actual rate of return - prior 5-year period	Most Recent Actuarial Funding Valuation or System					
16		Investment Provider	27.74%				
47	Enter actual rate of return - prior 10-year period	Most Recent Actuarial Funding Valuation or System					
17	lenter actual rate of return - prior 10-year period	Investment Provider	140.66%				
18	Actuarial Assumptions						
19	Actuarial assumed rate of investment return	Most Recent Actuarial Funding Valuation	7.00%				
20	Amortization method utilized for funding the system's unfunded actuarial accrued liability, if any	Most Recent Actuarial Funding Valuation					
21	Amortization period utilized for funding the system's unfunded actuarial accrued liability, if any	Most Recent Actuarial Funding Valuation					
22	Is each division within the system closed to new employees?	Most Recent Actuarial Funding Valuation	Yes				
23	Uniform Assumptions						
24	Enter retirement pension system's actuarial value of assets using uniform assumptions	Most Recent Actuarial Funding Valuation	61,136,628				
25	Enter retirement pension system's actuarial accrued liabilities using uniform assumptions	Most Recent Actuarial Funding Valuation	53,264,703				
26	Funded ratio using uniform assumptions	Calculated	114.8%				
27	Actuarially Determined Contribution (ADC) using uniform assumptions	Most Recent Actuarial Funding Valuation	-				
28	All systems combined ADC/Governmental fund revenues	Calculated	0.0%				
29	Pension Trigger Summary				·	·	
		Primary unit triggers: Less than 60% funded AND greater					
30	Does this system trigger "underfunded status" as defined by PA 202 of 2017?	than 10% ADC/Governmental fund revenues. Non-Primary	NO	NO	NO	NO	NO
1		unit triggers: Less than 60% funded					

Requirements (For your information, the following are requirements of P.A. 202 of 2017)
Local units must post the current year report on their website or in a public place.
The local unit of government must electronically submit the form to its governing body.
Local units must have had an actuarial experience study conducted by the plan actuary for each
retirement system at least every 5 years.
Local units must have had a peer actuarial audit conducted by an actuary that is not the plan actuary OR
replace the plan actuary at least every 8 years.

By emailing this report to the Michigan Department of Treasury, the local unit of government acknowledges that this report is complete and accurate in all known respects.

LANSING BOARD OF WATER & LIGHT DEFINED BENEFIT PLAN FOR EMPLOYEES' PENSIONS

STATEMENT OF INVESTMENT POLICIES, PROCEDURES AND OBJECTIVES

Effective May 22, 2018, except as otherwise noted herein

STATEMENT OF INVESTMENT POLICIES, PROCEDURES AND OBJECTIVES

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Introduction

The Lansing Board of Water and Light ("**BWL**") is a municipally owned utility providing drinking water, electricity, steam and chilled water services to the greater Lansing area in mid-Michigan. The Plan receives contributions from the Lansing Board of Water and Light. The Plan pays retirement benefits provided for in the Plan. Plan assets are invested in various types of securities.

This Statement of Investment Policy ("**Statement**") is issued by the Commissioners of the Lansing Board of Water & Light (the "**Commissioners**") for the Lansing Board of Water and Light Defined Benefit Plan for Employees' Pensions ("**Plan**"). The purpose of this Statement is to (i) identify and present a set of investment objectives, an asset allocation policy, investment performance standards and procedures for managing the Plan's assets; and (ii) clarify the delegation of certain investment-related duties to the Retirement Plan Committee. This document is intended to be consistent with the provisions of Michigan Public Act 314 of 1965 ("**Act 314**"), as amended.

Updates to Statement

The Commissioners retain the authority to approve, revise and update this Statement as necessary to ensure that it is consistent with the BWL's investment philosophy. Any revisions or updates made to the Statement shall be communicated to the Trustees from time to time in writing. The Trustees shall formally acknowledge any revisions or updates by communicating the same to the Commissioners in writing. It shall be the duty of the Trustees to act strictly in accordance with the Statement, and any changes therein, as so communicated to and acknowledged by the Trustees.

Trustees

The Trustees of the Plan are the eight appointed voting Commissioners of the Lansing Board of Water & Light. The Trustees have delegated certain responsibilities that are described in this Statement to the Retirement Plan Committee, effective as of the date on which this Statement is acknowledged by the Trustees by signature of an authorized representative of the Trustees. As of that date, all provisions in this Statement relating to the Retirement Plan Committee shall become operative.

Responsibility for selecting and providing direction to Investment Managers, Investment Consultants, custodians, and other administrators required for the management of the Plan's assets and for evaluating overall investment results has been delegated to the Retirement Plan Committee which shall report to the Trustees regarding selections made and investment performance. The Trustees, in evaluating the Retirement Plan Committee's actions, shall act in accordance with the terms of this Statement, as updated from time to time by the Commissioners, and as communicated to the Trustees in writing.

Purpose of the Plan

The Plan was established for the purpose of providing retirement benefits to eligible employees and their beneficiaries. The Plan was closed to new employees hired after

December 31, 1996. The Plan is a governmental defined benefit pension plan which provides retirement, early retirement, disability, termination, and death benefits based upon a formula that includes final average compensation, years of credited service, and a pension benefit percentage. An investment portfolio is maintained to invest employer contributions and to reinvest income.

Investment Philosophy

The Commissioners, Trustees and the Retirement Plan Committee recognize their respective fiduciary duties to invest the Plan's assets in formal compliance with the Prudent Man Rule. The Trustees interpret this to mean that, in addition to the specific guidelines and restrictions set forth in this document, the assets of the Plan shall be actively managed -- that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. Further, the Trustees recognize that, commensurate with its overall objective of maximizing long-range returns while maintaining a high standard of portfolio quality and consistency of return, it is necessary that proper diversification of assets be maintained both among and within the classes of securities held. Within this context of active management and the necessity for adherence to proper diversification, the Trustees and the Retirement Plan Committee rely upon appropriate professional advice.

Delegation of Responsibilities

Retirement Plan Committee

The Retirement Plan Committee acknowledges its responsibility as a fiduciary to the Plan. In this regard, the Retirement Plan Committee must act prudently and for the exclusive interest of the Plan's participants and beneficiaries.

More specifically, the Retirement Plan Committee's responsibilities include:

- 1. Complying with the provisions of pertinent federal, state, and local laws and regulations relating to the investment of Plan assets.
- 2. Evaluating and appointing a qualified manager(s) and consultant(s) to invest and manage the Plan's assets.
- 3. Communicating the investment goals, objectives, and standards to the investment managers including any material changes that may subsequently occur.
- 4. Determining, with the advice of the Investment Consultant ("Consultant"), how Plan assets should be allocated among various asset classes.
- 5. Review and evaluate the results of the Investment Manager(s) ("Manager(s)") in context with established standards of performance.
- 6. Taking whatever corrective action is deemed prudent and appropriate when an investment manager fails to perform as mutually expected.
- 7. The Retirement Plan Committee will notify the Manager(s) of:
 a) Significant changes in the Plan cash flow and/or cash flow needs; and
 b) Any matter which bear upon the proper investment management of the Plan's assets, including pertinent financial, legal, and actuarial information.
- 9. Monitor all costs associated with the administration of the Plan's investment to ensure that they are reasonable with market averages.

10. Review any program that may mitigate or offset costs.

The Retirement Plan Committee shall give consideration to and have an understanding of the following prior to retaining professionals:

- 1. Establishing standards/requirements/appropriateness of services.
- 2. Identification of appropriate candidates for the position.
- 3. Solicitation of bids and proposals.
- 4. Conduct interviews.
- 5. Check references.
- 6. Make reasoned decisions based on all information, including:
 - a) Philosophy/Goals (i.e., Mission Statement)
 - b) Ownership/Management/Organizational Structure/Turnover
 - c) Operational History/Growth Plan
 - d) Infrastructure: Resources/Tools-of-the-Trade
 - e) Financial Condition
 - f) Educational Background/Industry Experience
 - g) Professional Qualifications
 - h) Risk Controls/ Insurance
 - I) Criminal, Civil, Regulatory History
 - j) Fees
 - k) Liquidity
- 7. Document the decision process.
- 8. Verify compliance with federal and state laws; specifically, Act 314, and Investment Guidelines.
- 9. Establish standards of conduct, terms and conditions of relationship (Written Contract/Agreement).

Investment Consultant

In carrying out its delegated responsibilities, the Retirement Plan Committee considers the services of a Consultant as appropriate to assist in the placement of investment funds. The primary role of the Consultant is to provide independent, objective, thirdparty advice and counsel that will enable the Retirement Plan Committee to make wellinformed and timely decisions regarding the investment of the Plan's assets.

The Consultant's role is that of an advisor to the Plan. The Consultant acknowledges its responsibilities as a fiduciary under Act 314. The Consultant acknowledges that it is a registered investment advisor under either the Investment Advisors Act of 1940 or the Michigan Uniform Securities Act.

Investment advice concerning the investment management of Plan assets will be offered by the Consultant, and will be consistent with the investment objectives, policies, guidelines and constraints as established in this statement. In specific terms, the primary responsibilities of the Consultant are as follows:

- 1. Measure and evaluate investment performance each calendar quarter.
- 2. Evaluate the Plan's tolerance for risk.

- 3. Advise regarding appropriate investment objectives and goals based on the Plan's needs and risk tolerance.
- 4. Determine what degree of potential market volatility should be factored into the investment approach.
- 5. Based on all of the above, advise regarding optimal allocation of assets.

Providing a Range of Capabilities

The Consultant is a third party retained by the Retirement Plan Committee to assist in several key areas of the management of financial assets.

The Consultant may be asked to:

- 1. Gather and evaluate statistical information on the financial assets, investment needs, and risk parameters.
- 2. Analyze and understand the implications of historic capital market behavior, particularly with regard to the trade-off between total rate of return and investment risk.
- 3. Maintain data on the universe of available professional investment managers, and categorize (as to investment style and discipline) and evaluate the qualifications of the individual management firms.
- 4. Provide periodic asset allocation studies and updates.
- 5. Conduct periodic trustee educational workshops.
- 6. Provide information with respect to alternate investments.
- 7. Monitor the investment of the Plan's assets for compliance with Act 314.
- 8. Analyze and evaluate the Plan's investment performance, and the performance of its investment managers, both past and ongoing.
- 9. Make specific and timely recommendations for the consideration of the Management during each phase of the investment management process.
- 10. Monitor all costs associated with the administration of the Plan's investment to ensure that they are reasonable with market averages.

Making Recommendations

Investment Policy - The Consultant may be asked to recommend an appropriate investment policy that will meet the Plan's needs. This includes recommending investment objectives and guidelines that adhere to the goals and tolerance for risk. The Consultant may be asked to provide an appropriate model of asset allocation composed of equity, fixed-income, money market instruments or alternative investments designed to meet the established objectives.

Manager Selection - The Consultant may be asked to recommend the best qualified and most appropriate Manager(s) candidates for implementing the established investment policy. The Consultant shall be capable of utilizing a well-established system to select suitable Manager(s) candidates from both a local and national investment manager database.

Manager Performance Review and Evaluation

The Consultant shall provide the Retirement Plan Committee with performance reports and ongoing quality control to assure that the standards and investment objectives are maintained. Performance reports generated by the Consultant shall be compiled at least quarterly and communicated to the Retirement Plan Committee for review. The investment performance of total portfolios, as well as asset class components, will be measured against commonly accepted performance benchmarks. Consideration shall be given to the extent to which the investment results are consistent with the investment objectives, goals, and guidelines as set forth in this statement. The Retirement Plan Committee intends to evaluate the portfolio(s) over at least a three year period, but reserves the right to terminate a Manager(s) for any reason including the following:

- 1. Investment performance which is significantly less than anticipated given the discipline employed and the risk parameters established, or unacceptable justification of poor results.
- 2. Failure to adhere to any aspect of this Statement of Investment Policy, including communication and reporting requirements.
- 3. Significant qualitative changes to a Manager(s) organization.

Manager(s) shall be reviewed regularly regarding performance, personnel, strategy, research capabilities, organizational and business matters, and other qualitative factors that may impact their ability to achieve the desired investment results.

Investment Manager(s)

Each Manager acknowledges its responsibility as an investment fiduciary under Act 314. Each Manager acknowledges that it is a registered investment advisor under either the Investment Advisors Act of 1940 or the Michigan Uniform Securities Act. Each Manager will have full discretion to make all investment decisions for the assets placed under its control, while observing and operating within all policies, guidelines, constraints, and philosophies as outlined in this statement.

Adherence to Policy Guidelines and Objectives

The assets of the Plan are to be managed in accordance with the policy guidelines and objectives expressed herein as well as any additional guidelines provided separately. Assets shall be invested in strict compliance with Act 314. Each Manager shall manage its individual portfolio in compliance with Act 314.

Discretionary Authority

Each Manager is expected to exercise complete investment discretion. Such discretion includes decisions to buy, hold and sell equities or fixed income securities (including cash equivalents) in amounts and proportions reflective of the Manager's current investment strategy and compatible with the investment guidelines.

Each Manager is expected, within the limitation of the account size, to diversify the portfolio to minimize the risk of large losses unless, under the circumstances, it is clearly prudent not to so diversify. The investment manager shall invest the assets of the Plan with the same care, skill, prudence and diligence under the circumstances then

prevailing that a prudent man, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with such aims. The investment manager will provide the Retirement Plan Committee with suggested strategy which might be changed or adopted to better suit the investment guidelines adopted by the Retirement Plan Committee.

Communications

Each Manager is responsible for communicating with the Retirement Plan Committee regarding all significant matters pertaining to the investment of the Plan's assets. The Retirement Plan Committee shall be kept apprised of substantive changes in investment strategy, asset mix, portfolio structure, and market value of the Plan's assets. If requested, Manager(s) will meet with the Retirement Plan Committee on a quarterly basis to review the portfolio and the investment outlook.

Reporting

Each Manager is expected to provide:

- 1. INITIALLY, a written statement (per management agreement) acknowledging their acceptance of the guidelines and performance standards herein stated.
- 2. AT LEAST QUARTERLY, a portfolio composition report to the Retirement Plan Committee of the funds under their management. The report shall contain as a minimum the following data:
 - a. Investment Review
 - i. Account characteristics;
 - ii. Investment summary to include asset description, cost, date, unit value, market value, percent of market, current yield, unrealized gains/losses, and estimated annual income;
 - iii. Maturity schedule to include year due and percent of total; and
 - b. Summary and statement of assets under management.
- 3. ANNUALLY, and thereafter at the request of the Retirement Plan Committee, participation in a review meeting, the agenda to include, but not restricted to
 - a. A review and re-appraisal of the herein contained Statement;
 - b. A brief review of the recent capital market environment to include discussion of any event particularly pertinent to the management of this portfolio;
 - c. A commentary on investment results in light of the appropriate standards of performance as stated herein;
 - d. A synopsis of key investment decisions made by the Manager, the underlying rationale, and how those decisions could impact future results;
 - e. Recommendations as to changes in goals or standards, based upon material and sustained changes in the capital markets;
- 4. UPON WRITTEN OR ORAL REQUEST
 - a. Copies of all documentation in support of any investment activity;
 - b. A summary of receipts and disbursements;
 - c. A listing of assets acquired and disposed of;
 - d. Evidence of suitable insurance coverage of the Manager's fiduciary responsibilities.

- 5. IMMEDIATE NOTIFICATION
 - a. Notice of material changes in the Manager's outlook, policy, and tactics
 - b. Notice of material changes in ownership, organizational structure, financial condition, senior staffing and management of the Manager's organization.

Each manager's investment guidelines and performance objectives are made a part of their investment management agreement. Compliance with these guidelines and objectives is evaluated during the quarterly investment performance evaluation process.

Custodian

The primary responsibilities of the custodian ("Custodian") are to:

- 1. Provide adequate safekeeping services.
- 2. Settle securities transactions on time.
- 3. Collect trust fund income when due.
- 4. Provide adequate accounting services.
- 5. Prepare useful, accurate, and timely investment reports.
- 6. Provide adequate cash-management services.
- 7. Provide adequate administrative support.
- 8. Develop and maintain adequate data processing capabilities.
- 9. Handle proxy administration promptly and accurately.
- 10. Complete and file timely proof of claims for settlements of security class action suits and monitor the processing to ensure claims are received.

Plan Investment Policy

The Plan is maintained to provide retirement benefits for the participants and their beneficiaries. The Plan is established in accordance with the laws of the State of Michigan whereby it operates and is controlled, as to its investments, by PA 314.

The Trustees (or their delegate) are authorized and permitted by the Plan Document and under Michigan law to engage the services of a Manager(s), Consultant and Custodian and to set the direction for the investments.

The Trustees require that the Manager(s), Consultant and Custodian comply with all applicable laws, rules and regulations. Manager(s) will be given full discretion in managing the funds within this Statement.

Plan Investment Objectives

The Trustees' attitudes regarding Plan assets combine both preservation of capital and moderate risk-taking. The Trustees recognize that risk (i.e., the uncertainty of future events), volatility (i.e., the potential for variability of asset values), and the potential of loss in purchasing power (due to inflation) are present to some degree with <u>all</u> types of investment vehicles. While high levels of risk are to be avoided, the assumption of a moderate level of risk is warranted and encouraged in order to allow the opportunity to achieve satisfactory results consistent with the objectives and character of the Plan.

The policies and restrictions contained in this Statement should not impede the Manager to attain the overall Plan objectives, nor should they exclude the Manager from appropriate investment opportunities.

The Plan's overall investment objective is to earn an average, annual return of 7.0% over five-year rolling periods. Achievement of this objective is likely to result in stable to declining future contribution rates and ensure its ability to pay retirement benefits for all plan participants.

The Plan's objective is based on the expected returns under the strategic asset allocation policy, which follows. This asset allocation policy should result in normal fluctuation in the Plan's actual return, year to year. The expected level of risk (volatility, or return fluctuation) is appropriate given the Plan's current and expected tolerance for short-term return fluctuations. Appropriate diversification of Plan assets will reduce the Plan's investment return volatility.

Asset Allocation Policy

This strategic asset allocation policy is consistent with the achievement of the Plan's financial needs and overall investment objectives. Asset classes are selected based on the expected long-term returns, individual reward/risk characteristics, and correlation with other asset classes, manager roles, and fulfillment of the Plan's long-term financial needs. Conformance with PA 314 of 1965 and amendments thereof is also considered.

The Commissioners established an allocation range for each asset class in recognition of the need to vary exposure within and among different asset classes, based on investment opportunities and changing capital market conditions. The Commissioners selected the target allocation for each asset class based on the Plan's current financial condition, expected future contributions, withdrawals, plan expenses and current investment opportunities, notwithstanding short-term performance. The Commissioners intend to review these allocation targets at least annually, focusing on changes in the Plan's financial needs, investment objectives, and asset class performance.

Target Asset Allocation

Asset Class	Manager Role	Allocation Range	<u>Target</u> Allocation
Total Equity	Active/Passive	40 to 70%	55%
US Large Cap Equity	Active/Passive	20% to 30%	25%
US SMID Cap Equity	Active	5% to 15%	10%
Non-U.S. Equities	Active, Broad or Focused	15 to 25%	20%
Total Fixed Income	Active/Passive Core, Active Opportunistic, Intermediate Diversified	20 to 50%	40%
Core Fixed Income	Active/Passive Core, Intermediate Diversified	10 to 30%	20%
Multi-Sector Fixed Income	Active Fixed Income	5 to 15%	10%
Liquid Absolute Return Fixed Income	Active Fixed Income	5 to 15%	10%
Commercial Real Estate	Core, value-added, opportunistic, public or private	0 to 10%	5%
Cash Equivalents	Active, money market fund	0 to 5%	0%
	Total Fund		100.0%

The Trustees recognize that the transition to the above target allocations will be achieved over an appropriate period of time, based upon manager availability, selection and approval as well as portfolio needs and constraints.

The Trustees acknowledge that alternative asset classes are available and intend to periodically evaluate the merits of using different asset classes. The Trustees also recognize the benefits of diversifying manager roles within a given asset class and intend to periodically evaluate this decision as well as the active versus passive management decision.

In order to preserve capital gains and protect principal during periods of market duress, a short-term U.S. government and/or high-quality credit securities fund may be used. Given the infrequent short-term use and specialized purpose of this fund, it is not included in either the Policy Index or Target Asset Allocation.

Administrative and Investment Review Procedures

Review of Policies

All investment policies and investment management guidelines will be reviewed annually by the Trustees, or whenever circumstances change to the extent that the policies may be ineffective or inappropriate.

General Review

Annually, all those responsible for investment of the Plan's assets shall submit a report or meet with the Retirement Plan Committee to review their activities for the current year and discuss proposed changes that are anticipated.

Review of Investment Performance

The Retirement Plan Committee will monitor the investment performance of each manager and the overall deployment of the Plan's assets. Monitoring will include periodic meetings with the Manager(s), and a quarterly performance evaluation performed by the Consultant.

Each performance evaluation will include:

- 1. The present and prospective economic climate;
- 2. Current period and historical, time-weighted rates of return for the overall Plan, including an evaluation against the previously specified performance standards;
- 3. Current period and historical, time-weighted rates of return for each Manager, including an evaluation against the previously specified performance standards;
- 4. Additional quantitative measures and analysis will be employed to objectively monitor each Manager's compliance with investment policies and guidelines.
- 5. An understanding of the strategy being used by each Manager to carry out the current Investment Policy; and
- 6. Opportunities available within current and prospective asset categories.

The Retirement Plan Committee requests that all documents, exhibits, written materials, etc. to be used during the meetings be submitted in advance.

Individual Investment Manager Objectives

On a quarterly basis, the performance of each of the investment managers will be compared to a relevant benchmark index and to a relevant universe of investment management firms. The ongoing review and evaluation of investment manager results will be the responsibility of the Retirement Plan Committee, with the assistance of the Consultant. The primary emphasis of the review of each investment manager will be placed on relative rates of return and risk as compared against relevant benchmarks, peers and expectations for each specific manager.

Over a market cycle (usually 3-5 years), the following are the performance expectations for each portfolio:

- The total return of each portfolio should exceed the total return of the relevant index.
- The total return of each portfolio should rank median or higher when compared to the relevant peer group.

In addition to relative rates of return each portfolio's performance will be evaluated based on its relative risk profile as measured by its standard deviation and other benchmark relative statistics; risk adjusted returns as measured by the portfolio's Sharpe ratio and performance in up and down markets.

Passive portfolio allocations are expected to approximate the risk and return profile of the appropriate benchmark.

Rebalancing Policy – Overall Fund Allocation

The system of asset allocation rebalancing to be utilized involves a target asset mix around which variance is allowed within prescribed limits. Rebalancing will be addressed when a limit is reached or exceeded. In addition to monitoring target and actual allocations quarterly, the Retirement Plan Committee will formally review the policy and actual allocations in light of anticipated cash flow.

Review of Investment Management

Manager(s) are responsible for frequent and open communication (in writing) with Management and the Consultant on all significant matters pertaining to Investment Policy and the management of the Plan's assets, including, but not limited to:

- 1. A quarterly report of major changes in each Manager's investment outlook, investment strategy and portfolio structure.
- 2. Any significant changes in ownership, organizational structure, financial conditions, or senior personnel staffing of each Manager's organization.
- 3. Any investment guidelines which inhibit the fulfillment of a Manager's fiduciary duties, inappropriately restrict performance, or prevent the manager from meeting their performance standards.

Proxy Voting

The Trustees confer the right to vote proxies to the Manager(s), unless the Manager(s) are otherwise notified by the Retirement Plan Committee in writing. It is expected that Manager(s) will vote for the sole benefit of the Plan participants and beneficiaries, considering those factors that may affect the value of the Plan's investments and not subordinate the interests of the participants and beneficiaries in their retirement income to unrelated objectives.

A summary of votes cast shall be submitted to the Retirement Plan Committee on an annual basis. This summary must identify the company, number of shares held, subject proxy issues, actual vote (whether for or against the Retirement Plan Committee's recommendation), and justification.

Directed Brokerage

With regard to directed-brokerage, the Trustees do not require the Manager(s) to trade securities through an individual or set of broker-dealers. The Trustees wish to give the Manager(s) full discretion over their choice of broker-dealers, so long as the Plan's total cost or proceeds of transactions are the most favorable under the circumstances.

<u>Tenure</u>

While the relationship with Manager(s) is expected to be ongoing, the Retirement Plan Committee reserves the right to terminate their relationship with any retained Manager at any time they deem appropriate.

In General Managers are fiduciaries with discretion to implement the guidelines within the direction provided by this Statement. All Managers are expected to be familiar with and follow the investment guidelines established under Michigan PA Act 314 with amendments.

Managers should present (and obtain approval on) material changes in their investment style, philosophy or process to the Retirement Plan Committee before implementing any changes on behalf of the Plan.

Managers (except commingled funds) are prohibited from using warrants, options, futures, collectibles, leverage, mutual funds (money market funds exempted), LLCs, ETFs, unit investment trusts, margin purchases or short sales, securities of Plan service providers (custodial bank notwithstanding), and loaning or pledging securities (certain index funds exempted). While commingled funds are exempt from the prohibited securities noted above, they are expected to be managed within the guidelines set forth for each fund. Commingled fund managers are required to comply with the appropriate performance standards and reporting requirements contained in this document.

If a Manager would like to purchase a security that falls outside of this Plan's investment guidelines (commingled funds exempted), or is in doubt as to the goal and intent of these guidelines, they should submit a written request for clarification to the Retirement Plan Committee prior to purchase. Any security not specifically defined or permitted within is prohibited for investment on behalf of this Plan.

Cash Equivalents The cash equivalents Manager may invest in any institutional money market fund ("Fund") that follows the following objectives and policies:

1. The Fund seeks to provide current income while maintaining liquidity and a stable share price of \$1.

- 2. The Fund invests primarily in high-quality, short-term money market instruments, including certificates of deposit, Bankers Acceptances, commercial paper (except ABS commercial paper), and other money market securities.
- 3. To be considered high-quality, a security generally must be rated in one of the two highest credit-quality categories for short-term securities by at least two nationally recognized rating services (or by one, if only one rating service has rated the security).
- 4. If unrated, the security rating must be determined by the manager, subject to the limitations in item 3.
- 5. The Fund maintains a dollar-weighted average maturity of 90 days or less.

Total Plan Performance

The primary investment objective is to meet the long-term financial goals of the Lansing Board of Water and Light Plan. The Plan's asset allocation will be used as the primary tool to achieve this goal.

The Plan is expected to meet or exceed the following objectives over a full market cycle (usually three to five years):

- 1) Earn a rate of return after all expenses that equals or exceeds the current actuarial assumed rate of return of 7.0%
- 2) The Plan's total return should exceed the total return of the Policy index comprised of the following:

Index	Percent
Russell 1000	25%
Russell 2500	10%
MSCI ACWI ex-US	20%
BloomBar US Aggregate	35-40%*
NFI ODCE (net) Index	0-5%*

* An allocation to private real estate has been approved. The policy index will include an allocation to the NFI ODCE (net) Index after the funding of private real estate occurs. The policy index allocation to the BloomBar US Aggregate index will be reduced from 40% with the funding of private real estate.

- 3) The Plan's total return should rank at median or above when compared to a universe of other portfolios with a similar equity allocation.
- 4) In addition to relative rates of return the Plan's performance will be evaluated based on its relative risk profile as measured by its standard deviation, beta, correlation to the Policy Index, risk adjusted returns as measured by the Plan's Sharpe ratio and performance in up and down markets.

Conclusion

It is in the intent of this Statement to state an attitude and/or philosophy which will guide Managers toward the performance desired. It is further intended that these objectives be sufficiently specific, but also sufficiently flexible.

It is the opinion of the Commissioners that these limitations and guidelines will not prevent a Manager from achieving the objectives set forth.

Glossary of Investment Terms

Alternative Investments - These investments are typically made through the purchase of limited partner units in a private limited partnership. Alternative investments include hedge funds, managed futures and commodities, private equity, real assets and other.

Asset Allocation - A process used to determine the optimal allocation of a fund's portfolio among broad asset classes.

Benchmark Index - An index against which the investment performance of a Manager can be compared for the purpose of determining the value added by the Manager. A benchmark portfolio must be of the same style as the Manager, and in particular, similar in terms of risk.

Best Execution - This is formally defined as the difference between the strike price (the price at which a security is actually bought or sold) and the fair market price which involves calculating opportunity costs by examining the security price immediately after the trade is placed. Best execution occurs when the trade involves no opportunity cost, for example when there is no increase in the price of a security shortly after it is sold.

Fiduciary - Indicates the relationship of trust and confidence where one person (the fiduciary) holds or controls property for the benefit of another person.

Funding Risk - The risk that anticipated contributions to the fund would not be made.

Liquidity - In general, liquidity refers to the ease by which a financial asset can be converted into cash. Liquidity is often more narrowly defined as the ability to sell an asset quickly without having to make a substantial price concession.

Nominal Return - The nominal return on an asset is the rate of return un-adjusted for any change in the price level. The nominal return is contrasted with the real return that is adjusted for changes in the price level.

Standard Deviation - A statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns typically are. The wider the range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e. has a bell shaped curve distribution) then approximately two-thirds of the returns would occur within plus or minus one standard deviation from the sample mean.

Strategic Asset Allocation – The strategic mix of assets designed to accomplish a long-term goal such as funding pension benefits. Generally, policy targets are set for the strategic asset classes with allowable ranges around those targets. The allowable ranges are established to allow flexibility in the management of the investment portfolio.

Systematic Risk - The part of a security's total risk that is related to movements in the market and therefore cannot be diversified away.

Tactical Asset Allocation – The tactical mix of assets is short-term in nature with a goal of maximizing returns. This strategy is used to take advantage of current market conditions that may be more favorable for one asset class over another.

Time-weighted Return - A method of measuring the performance of a portfolio over a particular period of time. It is the cumulative compounded rate of return of the portfolio, calculated on each date that cash flow moves into or out of the portfolio.

Universe - A group of Managers/Funds chosen to have an investment style similar to the Manager/Fund and used for comparison purposes.

Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light

Financial Report

With Required Supplementary Information As of and for the Years Ended June 30, 2019 and 2018

Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light

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INDEPENDENT AUDITORS' REPORT

To the Honorable Mayor, Members of the City Council, and Commissioners of the Board of Water and Light Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light City of Lansing, Michigan

We have audited the accompanying financial statements of the Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light ("Plan") as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary position of the Plan as of June 30, 2019 and 2018, and the respective changes in fiduciary position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Baker Tilly Virchaw Krause, LP

Madison, Wisconsin September 5, 2019

Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light

Management's Discussion and Analysis

Using this Annual Report

This annual report consists of two parts: (1) Management's Discussion and Analysis (this section) and (2) the financial statements. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data.

Condensed Financial Information

The table below compares key financial information in a condensed format between the current year and the prior two years:

	2019		2018		2017	
Assets held in trust:						
Cash and money market trust funds	\$	3,437,276	\$	1,985,712	\$	2,927,461
Fixed income securities		20,108,406		34,748,141		33,706,611
U.S. government obligations		18,994,138		26,527,961		29,051,025
Equities		67,168,552		48,418,160		54,440,986
Mutual funds and other		85,263,185		72,109,667		53,089,093
Interest and dividend receivable		261,067		404,369		425,197
Trade Receivable - Due from Broker		1,539				88,410
Total plan assets	\$	195,234,163	\$	184,194,010	\$	173,728,783
Liabilities:						
Trade Payable - Due to Broker	\$	75,586	\$	154,385	\$	93,727
Net Position Restricted for Pensions	\$	195,158,577	\$	184,039,625	\$	173,635,056
Changes in net position:	~	44 007 000	e	11 020 002	e	10,020,507
Net investment income	\$	11,687,552	\$	11,038,903	\$	18,039,507
Employer contributions		9,277,538		10,395,327		9,573,671
Retiree benefits paid Administrative fees		(9,277,538)		(10,395,327)		(9,573,671)
Auministrative lees		(568,600)		(634,334)		(704,793)
Net change in net position	\$	11,118,952	\$	10,404,569	\$	17,334,714

Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light

Management's Discussion and Analysis

Investment Objectives and Asset Allocation

The assets shall be invested in accordance with sound investment practices that emphasize long-term investment fundamentals. In establishing the investment objectives of the Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light ("Plan"), the BWL has taken into account the time horizon available for investment, the nature of the Plan's cash flows and liabilities, and other factors that affect the Plan's risk tolerance. Consistent with this, the BWL has determined that the investment objective is income and growth. This investment objective is a balanced approach that emphasizes a stable and substantial source of current income and some capital appreciation over the long term.

Consistent with the advice of its investment advisor, the BWL has selected the following target asset allocation strategy:

Asset Class	Target Asset Allocation
Core bonds	15%
Multi-sector	5%
Liquid absolute return	5%
U.S. large cap equity	30%
U.S. small cap equity	10%
Non–U.S. equity	20%
Core real estate	8%
Value add RE	<u>7%</u>
Total	100%

Investment Results

The fiscal year ended June 30, 2019 saw a net investment income, net of administrative expenses, of \$11.1 million. We believe this performance is in line with the overall level of performance experienced by the stock and bond markets.

Future Events

The BWL is funding its other postemployment benefits (OPEBs) and is intending to meet its actuarially determined contributions (ADC).

Contacting the Plan's Management

This financial report is intended to provide a general overview of the Plan's finances and to show accountability for the money it receives. If you have questions about this report or need additional information, you may write the Lansing Board of Water and Light, Chief Financial Officer, P.O. 13007, Lansing, Michigan 48901-3007.

Statement of Fiduciary Net Position

	As of June 30			
	2019		2018	
Assets				
Investments - fair value:				
Cash and money market trust funds	\$	3,437,276	\$	1,985,712
Fixed income securities		20,108,406		34,748,141
U.S. government obligations		18,994,138		26,527,961
Equities		67,168,552		48,418,160
Mutual funds		85,263,185		72,109,667
Total investments at fair value		194,971,557		183,789,641
Investment interest and dividend receivable		261,067		404,369
Trade receivable - due from broker		1,539		-
Total assets		195,234,163		184,194,010
Liabilities				
Trade payable - due to broker		75,586		154,385
Net position restricted for retiree benefits	<u>\$</u>	195,158,577	\$	184,039,625

Statement of Changes in Fiduciary Net Position

	For the Year Ended June 30			
		2019		2018
Additions				
Investment income:				
Net appreciation in fair value of investments	\$	7,052,500	\$	6,742,518
Interest and dividend income		4,635,052		4,296,385
Total investment income		11,687,552		11,038,903
Employer contributions		9,277,538		10,395,327
Total additions		20,965,090		21,434,230
Deductions				
Retiree benefits paid		9,277,538		10,395,327
Administrative expenses		568,600		634,334
Total deductions		9,846,138		11,029,661
Net Increase in Net Position		11,118,952		10,404,569
Net Position Restricted for Retiree Benefits				
Beginning of year		184,039,625		173,635,056
End of year	\$	195,158,577	\$	184,039,625

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 - Summary of Significant Accounting Policies

Reporting Entity

The Board of Water and Light – City of Lansing, Michigan ("BWL") sponsors the Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light ("Plan"), which is a single-employer defined benefit healthcare plan. The Plan was established on October 20, 1999, effective as of July 1, 1999, for the purpose of accumulating assets to fund retiree healthcare insurance costs in future years.

Accounting and Reporting Principles

The Plan follows accounting principles generally accepted in the United States of America (GAAP) as applicable to governmental units. Accounting and financial reporting pronouncements are promulgated by the Governmental Accounting Standards Board.

Basis of Accounting

Fiduciary funds use the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Employer contributions to the Plan are recognized when due pursuant to legal requirements.

Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

Report Presentation

This report includes the fund-based statements of the Plan.

Investment Valuation and Income Recognition – Plan investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price.

Purchases and sales of investments are recorded on a trade-date basis.

Appreciation or depreciation of investments is calculated based on the beginning of the period's fair value of investments.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 - Summary of Significant Accounting Policies (Continued)

Report Presentation (Continued)

Expenses – Substantially all Plan expenses are paid by the Plan.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Note 2 - Description of the Plan

The following description of the Plan, a trust fund of the BWL, provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

General – The Plan was established on October 20, 1999, effective as of July 1, 1999, to constitute a voluntary employee beneficiary association (VEBA) under Section 501(c)(9) of the Internal Revenue Code of 1986, as amended. The Plan was formed for the purpose of accumulating assets sufficient to fund retiree healthcare insurance costs in future years.

The Plan is a single-employer defined benefit healthcare plan. The Plan provides medical, dental, and life insurance benefits in accordance with Section 5–203 of the City Charter. The City Charter grants the authority to establish and amend the benefit terms to BWL. Substantially all of the BWL's employees may become eligible for healthcare benefits and life insurance benefits if they reach normal retirement age while working for the BWL. There were 745 participants eligible to receive benefits at June 30, 2019 and 728 participants eligible at June 30, 2018.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 - Description of the Plan (Continued)

Benefits – Benefits shall not be paid from this Plan to participants or their beneficiaries during a plan year in which there has been a "qualified transfer" pursuant to Internal Revenue Code Section 420(e)(1)(8) from the Lansing Board of Water and Light Defined Benefit Plan for the Employees' Pensions, except that once the "qualified transfer" has been exhausted for the purpose of paying qualified current retiree health liabilities, benefit payments may be made under this Plan consistent with Internal Revenue Code Section 420(e)(1)(B). After "qualified transfers" have been exhausted, benefits paid under this Plan shall be those benefits described in the relevant sections of the Postretirement Benefit Plan for Eligible Employees of the Lansing Board of Water and Light.

Trustees - Each voting member of the BWL Board of Commissioners is a Trustee during the term of office as a commissioner. The Trustees have appointed Fifth Third Bank as custodian of the Plan's assets.

Contributions - Section 5-203 of the City Charter grants the authority to establish and amend the contribution requirement of the City and Plan members to BWL. The retiree benefits are paid by BWL's general cash flow to the third party administrators who process participant claims. These payments represent contributions to the Plan. Employer contributions in the statement of changes in net position are equal to the retiree benefits paid because the actuarially determined contribution (ADC) for the year ended June 30, 2019 was less than the pay-as-you-go amount. During the years ended June 30, 2019 and 2018, the cost to BWL of maintaining the Plan was \$9,277,538 and \$10,395,327 of which, respectively, was incurred as retiree benefit payments. The BWL may make additional contributions in such a manner and at such times as appropriate. All contributions received, together with the income thereon, are held, invested, reinvested, and administered by the Trustees pursuant to the terms of the Plan agreement. Additional contributions are only made to the Plan if the ADC is more than the pay-as-you-go amount. No employee contributions are allowed under this Plan. Contributions are recognized when due and when the amount to be contributed is committed by the BWL. For the years ended June 30, 2019 and 2018, the contribution rates of the employers were 16.3 percent and 18.7 percent of covered-employee payroll, respectively.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Description of the Plan (Continued)

Participation – Participation in this Plan is determined in accordance with the terms of the Post–Retirement Benefit Plan and Trust for Eligible Employees of the Lansing Board of Water and Light. At June 30, 2019, there were 690 active participants (not eligible to receive benefits), 78 disabled participants, 523 retired participants, and 144 surviving spouses participating in the Plan. At June 30, 2018, there were 703 active participants (not eligible to receive benefits), 77 disabled participants, 506 retired participants, and 145 surviving spouses participating in the Plan.

Vesting – Benefits become payable in accordance with the terms of the Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light. At no time will benefits of the Plan be vested. The BWL may reduce or eliminate any or all plan benefits at any time, subject to the requirements of any collective bargaining agreement.

Termination – In the event of Plan termination, all Plan assets shall be used to purchase additional eligible benefits in accordance with the terms of the Plan agreement. In the event of dissolution, merger, consolidation, or reorganization of the BWL, the Plan shall terminate and liquidate in a manner consistent with the Plan agreement unless the Plan is continued by a successor to the BWL.

Note 3 - Cash, Investments, and Fair Disclosure

The Plan is authorized through Public Act 149 of 1999 to invest in accordance with Public Act 314. Public Act 314 of 1965, as amended, allows the Plan to invest in certain reverse repurchase agreements, stocks, diversified investment companies, annuity investment contracts, real estate leased to public entities, mortgages, real estate, debt or equity of certain small businesses, certain state and local government obligations, and certain other specified investment vehicles.

The Plan's deposits and investment policies are in accordance with PA 196 of 1997 and have authorized the investments according to Michigan PA 314 of 1965, as amended.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 3 - Cash, Investments, and Fair Disclosure (Continued)

The Plan's cash and investments are subject to several types of risk, which are examined in more detail below:

Custodial Credit Risk of Bank Deposits

Custodial credit risk is the risk that in the event of a bank failure, the Plan's deposits may not be returned to it. The Plan requires that financial institutions must meet minimum criteria to offer adequate safety to the Plan. The Plan evaluates each financial institution with which it deposits funds and only those institutions meeting minimum established criteria are used as depositories. The Plan does not have any deposits exposed to custodial credit risk.

Custodial Credit Risk of Investments

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Plan does not have a policy for custodial credit risk. At year-end, all investments of the Plan were held in the name of the Board of Water and Light and are therefore not subject to custodial credit risk.

Interest Rate Risk

Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates. The Plan's investment policy does not restrict investment maturities. At June 30, 2019, the average maturities of investments are as follows:

		Weighted Average
Investment	Fair Value	Maturity
U.S. government obligations	\$ 18,994,138	12.80 years
Fixed income securities	20,108,406	11.48 years
Money market trust funds	3,437,276	Less than 1 year
Portfolio weighted average maturity	-	12.12 years

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 3 - Cash, Investments, and Fair Disclosure (Continued)

At June 30, 2018 the average maturities of investments are as follows:

		Weighted Average
Investment	Fair Value	Maturity
U.S. government obligations	\$ 26,527,961	13.71 years
Fixed income securities	34,748,141	12.76 years
Money market trust funds	1,985,712	Less than 1 year
Portfolio weighted average maturity	-	13.17 years

Credit Risk

State law limits investments in commercial paper to the top two ratings issued by nationally recognized statistical rating organizations. The Plan has no investment policy that would further limit its investment choices. As of June 30, 2019, the credit quality ratings of debt securities are as follows:

Investment	Fair Value	Rating	Rating Organization
			<u></u>
U.S. government obligations - implicitly guaranteed	\$ 7,711,966	AA+	S&P
U.S. government obligations - implicitly guaranteed	367,684	AA	S&P
Fixed income securities	2,623,158	AAA	S&P
Fixed income securities	6,057,705	AA+	S&P
Fixed income securities	1,078,532	AA	S&P
Fixed income securities	422,260	AA-	S&P
Fixed income securities	773,675	A+	S&P
Fixed income securities	1,637,385	А	S&P
Fixed income securities	2,059,561	A-	S&P
Fixed income securities	2,972,577	BBB+	S&P
Fixed income securities	1,621,369	BBB	S&P
Fixed income securities	859,092	BBB-	S&P
Fixed income securities	3,092	B+	S&P
Money market trust funds	3,437,276	Not rated	Not rated

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 3 - Cash, Investments, and Fair Disclosure (Continued)

As of June 30, 2018, the credit quality ratings of debt securities are as follows:

			Rating
Investment	Fair Value	Rating	Organization
U.S. government obligations - implicitly guaranteed	\$ 10,714,313	AA+	S&P
U.S. government obligations - implicitly guaranteed	358,216	AA-	S&P
Fixed income securities	3,340,664	AAA	S&P
Fixed income securities	13,459,587	AA+	S&P
Fixed income securities	1,916,108	AA	S&P
Fixed income securities	429,721	AA-	S&P
Fixed income securities	768,211	A+	S&P
Fixed income securities	3,362,702	А	S&P
Fixed income securities	2,850,465	A-	S&P
Fixed income securities	4,246,060	BBB+	S&P
Fixed income securities	3,082,112	BBB	S&P
Fixed income securities	1,285,971	BBB-	S&P
Fixed income securities	6,540	B+	S&P
Money market trust funds	1,985,712	Not rated	Not rated

Note 4 - Tax Status

The Plan is exempt under Internal Revenue Code Section 501(c)(9) and received an exemption letter as of February 9, 2000. The Plan has since been amended. Management believes the Plan continues to operate as a qualified plan.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 5 – Plan Investments - Policy and Rate of Return

BWL's policy in regard to the allocation of invested assets is established and may be amended by the BWL Board by a majority vote of its members. It is the policy of the BWL Board to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The following was the Board's adopted asset allocation policy as of June 30, 2019 and 2018:

<u>Asset Class</u>	Target Allocation
U.S. Equities	40%
Non–U.S. Equities	20%
Global Fixed Income	25%
Commercial Real Estate	15%

Rate of Return – For the years ended June 30, 2019 and 2018, the annual moneyweighted rate of return on investments, net of investment expense, was 6.36% and 6.37%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Note 6 - Net OPEB Liability (Asset) of BWL

Net OPEB Liability (Asset) of BWL -The components of the net OPEB liability (asset) for BWL at June 30, 2019 and 2018 were as follows:

	June 30, 2019	June 30, 2018
Total OPEB Liability	\$ 148,549,677	\$ 203,487,066
Plan fiduciary net position	(195,158,575)	(184,039,625)
BWL's net OPEB liability (asset)	<u>\$ (46,608,898)</u>	<u>\$ 19,447,441</u>
Plan fiduciary net position as a percentage of		
the total OPEB Liability (asset)	131.38%	90.44%

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 6 – Net OPEB Liability (Asset) of BWL (Continued)

Actuarial assumptions – The total OPEB liability was determined by an actuarial valuation as of June 30, 2019 and 2018, using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.0%
Payroll Growth	9.3% growth at age 25 and decreases to
	6.4% for ages 60+. This percentage
	includes general wage inflation and merit /
	productivity increases
Long-term expected Rate of Return	7.5%
Healthcare cost trend rates	8.50% for 2019, decreasing 0.25% per year
	to an ultimate rate of 4.50% in 2035 and
	later years

For the June 30, 2019 and 2018 valuation, mortality rates were based on the PUBH-2010 General Mortality Table projected generationally using MP-2018 scale and the RPH-2014 Total Dataset Mortality Table, Male and Female, adjusted to 2006 and projected generationally using an MP-2017 Projection Scale, respectively.

Best actuarial practices call for a periodic assumption review and BWL had completed an experience study in 2017. At that time, Nyhart recommended BWL to complete another experience study prior to the fiscal year ending June 30, 2022 valuation.

For the June 30, 2019 valuation, the long-term expected rate of return is 7.50%. The rate was determined using a building-block method where expected future real rates of return are developed for each major asset class. These expected future real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of June 30, 2019 are as follows:

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 6 - Net OPEB Liability (Asset) of BWL (Continued)

<u>Asset Class</u>	Long-Term Expected Real Rate of Return
Core bonds	2.62%
Multi-sector	3.49%
Absolute return	3.75%
U.S. large cap equity	7.21%
U.S. small cap equity	8.42%
Non–U.S. equity	8.34%
Core real estate	6.78%
Value add RE	7.29%

For the June 30, 2018 valuation, the long-term expected rate of return is 7.50%. The rate was determined using a building-block method where expected future real rates of return are developed for each major asset class. These expected future real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of June 30, 2018 are as follows:

<u>Asset Class</u>	Long-Term Expected Real Rate of Return		
Core bonds	2.74%		
Multi-sector	3.60%		
Absolute return	3.82%		
U.S. large cap equity	7.53%		
U.S. small cap equity	8.79%		
Non–U.S. equity	8.73%		
Core real estate	5.91%		

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 6 – Net OPEB Liability (Asset) of BWL (Continued)

Discount Rate – The discount rate used to measure the total OPEB liability was 7.5%. The discount rate is based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA /Aa or higher (or equivalent quality on another rating scale) must be used.

Sensitivity of the net OPEB liability (asset) to changes in the discount rate – The following presents the net OPEB liability (asset) of BWL, as well as what BWL's net OPEB liability (asset) would be if it were calculated using a discount rate that is 1-percentage point lower (6.5 percent) or 1 percentage point higher (8.5 percent) than the current discount rate (7.5 percent) as of June 30, 2019 and 2018:

_	June 30, 2019			
	<u>1% Decrease</u>	Current Discount Rate	<u>1% Increase</u>	
Net OPEB Liability (asset)	\$(30,506,982)	\$(46,608,898)	\$(60,250,506)	
		June 30, 2018		
-	<u>1% Decrease</u>	Current Discount Rate	1% Increase	
Net OPEB Liability	\$43,845,533	\$19,447,441	\$(991,597)	

Sensitivity of the net OPEB liability (asset) to changes in the healthcare cost trend rates – The following presents the net OPEB liability (asset) of BWL, as well as what BWL's net OPEB liability (asset) would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (8.0 percent decreasing to 4.0 percent) or 1-percentage-point higher (10.0 percent decreasing to 6.0 percent) than the current healthcare cost trend rates as of June 30, 2019 and 2018:

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 6 - Net OPEB Liability (Asset) of BWL (Continued)

		June 30, 2019	
	<u>1% Decrease</u>	Healthcare Cost Trend Rates	<u>1% Increase</u>
Net OPEB Liability (asset)	\$(61,585,517)	\$(46,608,898)	\$(28,613,760)
		June 30, 2018	
	<u>1% Decrease</u>	Healthcare Cost Trend Rates	<u>1% Increase</u>
Net OPEB Liability	\$(2,824,476)	\$19,447,441	\$46,517,181

Note 7 – Fair Value Measurements

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy under authoritative guidance are described as follows:

- Level 1 Inputs to the valuation methodology are unadjusted quoted market prices for identical assets in active markets that the Plan has the ability to access.
- Level 2 Inputs to the valuation methodology include:
 - > quoted prices for similar assets or liabilities in active markets;
 - quoted prices for identical or similar assets or liabilities in inactive markets;
 - inputs other than quoted prices that are observable for the asset or liability;
 - > inputs that are derived principally from or corroborated by observable market data by correlation or other means; and
 - > if the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 7 – Fair Value Measurements (Continued)

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observables and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at June 30, 2019 and 2018:

Money market fund: Valued at the quoted net asset value ("NAV") of shares held by the Plan at year-end.

Common Stock, Fixed income securities, and U.S. government obligations: Valued at the most recent closing price reported on the market on which individual securities are traded.

Mutual funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily NAV and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 7 – Fair Value Measurements (Continued)

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of June 30, 2019 and 2018:

	June 30, 2019										
Investment Type	Level 1 Level 2		Level 3	Total							
Cash and money market trust fund	\$ –	\$ 3,437,276	\$ –	\$ 3,437,276							
Fixed income securities	-	20,108,406	-	20,108,406							
U.S. government obligations	-	18,994,138	-	18,994,138							
Common Stock	67,168,552	-	-	67,168,552							
Mutual funds		85,263,185		85,263,185							
Total	<u>\$ 67,168,552</u>	\$127,803,005	<u>\$ </u>	\$ 194,971,557							

	June 30, 2018									
Investment Type	Level 1	Level 2	Level 3	Total						
Cash and money market trust fund	\$ 3	\$ 1,985,709	\$ –	\$ 1,985,712						
Fixed income securities	-	34,748,141	-	34,748,141						
U.S. government obligations	-	26,527,961	-	26,527,961						
Common Stock	48,418,160	-	-	48,418,160						
Mutual funds		72,109,667		72,109,667						
Total	\$ 48,418,163	\$135,371,478	<u>\$ </u>	<u>\$ 183,789,641</u>						

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Risks and Uncertainties

Plan contributions are made and the accrued actuarial liability is reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

In addition, the Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the Statement of Fiduciary Net Position.

Note 9 – Subsequent Events

The Plan has evaluated subsequent events occurring through the date that the Plan's financial statements were approved and available to be issued, for events requiring recording or disclosure in the Plan's financial statements. There are no subsequent events warranting disclosures.

Required Supplementary Information

Required Supplemental Information (Unaudited)
Schedule of Changes in BWL's
Net OPEB Liability and Related Ratios
Last Ten Fiscal Years
(in thousands)

	2019	2018	2017	2016*	2015*	2014*	2013*	2012*	2011*	2010*
Total OPEB Liability										
Service cost	\$ 4,403	\$ 4,827	\$ 3,130	\$	- \$	- \$	- \$	- \$	- \$	- \$ -
Interest	14,920	15,039	14,226		-	-		_	-	
Changes in benefit terms	(415)	-	-		-	-		-	-	
Differences between expected and actual experience	(5,231)	(9,880)	5,281		-	-		-	-	
Changes in assumptions	(59,336)	(1,728)	(2,027)		-	-		-	-	
Benefit payments, including refunds	(9,278)	(10,395)	(9,574)				<u> </u>	:		<u> </u>
Net Change in Total OPEB Liability	(54,937)	(2,137)	11,036		-	-		-	-	
Total OPEB Liability- Beginning of year	203,487	205,624	194,588							
Total OPEB Liability- End of year	148,550	203,487	205,624		-	-		-	-	
Trust Net Position										
Contributions - Employer	9,278	10,395	9,574		-	-		-	-	
Contributions - Member	-	-	-		-	-		-	-	
Net investment income	11,688	11,039	18,040		-	-		-	-	
Administrative expenses	(569)	(634)	(705)		-	-		-	-	
Benefit payments, including refunds	(9,278)	(10,395)	(9,574)		-	-		-	-	
Other								:		
Net change in Net Position Held in Trust	11,119	10,405	17,335		-	-		-	-	
Trust fiduciary net position Beginning of year	184,040	173,635	156,300							
Trust fiduciary net position End of year	195,159	184,040	173,635			<u> </u>	<u> </u>			<u> </u>
BWL Net OPEB Liability (Asset)- Ending	<u>\$ (46,609</u>)	<u>\$ 19,447</u>	<u>\$ 31,989</u>	\$	- \$	- \$	- \$	<u> </u>	- \$	- <u>\$ -</u>
Trust Fiduciary Net Position as a % of Total OPEB Liability (Asset)	131.38%	90.44%	84.44%	- 0	% - %	% - %	6 - %	5 - %	6 - 9	6 #
Covered Employee Payroll	\$ 56,785	\$ 55,650	\$ 54,383	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
BWL's Net OPEB Liability (Asset) as a % of Covered Employee Payroll	(82.08%)	34.95%	58.82%	- 9	% - %	% - %	% - %	5 - %	6 - 9	6 #

*GASB Statement No. 74 was implemented as of June 30, 2017. Information from 2008 - 2016 is not available and this schedule will be presented on a prospective basis.

Required Supplemental Information (Unaudited) Schedule of Employer Contributions Last Ten Fiscal Years (in thousands)

Employer		ributions	Difference of		Percentage of Actual
Fiscal Year			Required to Actual	Covered Employee	Contributions to
Ended	Required	Actual	Contributions	Payroll	Covered Payroll
6/30/2010*	21,291	21,318	27	-	-
6/30/2011	17,300	17,236	(64)	47,213	37%
6/30/2012	15,774	15,854	80	46,885	34%
6/30/2013	13,994	14,045	51	47,468	30%
6/30/2014	9,200	9,268	68	46,971	20%
6/30/2015	5,762	9,671	3,909	50,885	19%
6/30/2016	5,788	9,423	3,635	53,893	17%
6/30/2017	7,508	9,574	2,066	54,383	18%
6/30/2018	7,535	10,395	2,860	55,650	19%
6/30/2019	7,031	9,278	2,247	56,785	16%

*GASB Statement No. 74 was implemented as of June 30, 2017. Information from 2010 is not available and this schedule will be presented on a prospective basis.

					Red	quired Su		ule of Inv	rmation (Unaudited) Investment Returns ast Ten Fiscal Years					
	2019	2018	2017	2016	2015*	2014*	2013*	2012*	2011*	2010*				
Annual money-weighted rate of return, net of investment expense	6.36%	6.37%	10.01%	0.32%	- %	- %	- %	- %	- %	- %				

*GASB Statement No. 74 was implemented as of June 30, 2017. Information from 2008 - 2015 is not available and this schedule will be presented on a prospective basis.

Notes to Required Supplementary Information (Unaudited) Years Ended June 30, 2019 and 2018

Actuarial valuation information relative to the determination of contributions:

Valuation date	June 30	, 2019,	based	on	roll-forward	of	February	28,	2019
	valuation	ı							

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal level % of salary method							
Amortization method	Level dollar over a 30-year closed period							
Remaining amortization period	30 years							
Inflation	3.0 percent							
Salary increases	9.3 percent growth at age 25 and decreases to 6.4 percent for							
	ages 60+. This percentage includes general wage inflation and							
	merit / productivity increases.							
Investment rate of return	7.5 percent per year compounded annually							
Mortality	PUBH-2010 General Mortality Table projected generationally							
	using MP-2018 scale							

Actuarial valuation information relative to the determination of contributions:

Valuation date	June	30,	2018,	based	on	roll-forward	of	February	28,	2018
	valua	tion								

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal level % of salary method
Amortization method	Level dollar over a 30-year closed period
Remaining amortization period	30 years
Inflation	3.0 percent
Salary increases	9.3 percent growth at age 25 and decreases to 6.4 percent for ages 60+
Investment rate of return	7.5 percent per year compounded annually
Mortality	RPH-2014 Total Dataset Mortality Table, Male and Female, adjusted to 2006 and projected generationally using an MP-2017 Projection Scale

Notes to Required Supplementary Information (Unaudited) Years Ended June 30, 2019 and 2018

Significant Changes:

June 30, 2019

- > Difference between actual and expected experience The \$5.2 million gain on the Total OPEB Liability for the fiscal year ending June 30, 2019 is primarily due to favorable demographic experience. The favorable experience is mainly attributable to terminations of active participants and deaths of participants with and without beneficiaries.
- > Assumption changes (1) The plan experienced a \$54.4 million gain on the Total OPEB Liability due to a change of the assumed per capita claims cost. The Board changed the Plan's insurance provider for Medicare eligible participants from The Hartford and EnvisionInsurance to Humana. Doing so resulted in a dramatic decrease in both the medical and prescription drug monthly premiums from the prior fiscal year (\$98.99 per month vs. \$219.54 per month for medical coverage and \$213.47 per month vs. \$305.00 per month for prescription drug coverage); (2) The Plan experienced a \$3.8 million loss on the mortality assumption change. The mortality assumption was updated from the RPH-2014 Total Dataset mortality, adjusted to 2006 and projected generationally using the MP-2017 improvement scale to the PUBH-2010 General Employees Mortality, projected generationally using the MP-2018 improvement scale; and (3) The Plan experienced a \$8.7 million gain on a change to the medical and prescription drug trend assumptions. The trend assumptions were changed to those prescribed under the Michigan Uniform Assumptions for the 2019 fiscal year.
- > Change in benefit terms The Plan experienced a \$.4 million gain due to an expected increase in the retiree contribution percentage for employees hired on or after January 1, 2009. The expected contribution percentage was increased from 14% to 20% of the premium charged to active employees.
- Investment loss During the fiscal year ending 6/30/2019 the actual return on assets was 6.36% vs. an expected return of 7.5%.

Notes to Required Supplementary Information (Unaudited) Years Ended June 30, 2019 and 2018

Significant Changes (Continued):

June 30, 2018

- Difference between actual and expected experience The \$9.9 million gain on the Total OPEB Liability for the fiscal year ending June 30, 2018 is attributable to a reduction in the per capita claims cost used in the 6/30/2018 valuation. Better than expected claims experience during the fiscal year resulted in a decrease in the projected claims when compared to those used in the 6/30/2017 valuation.
- > Assumption change The mortality improvement scale was updated to the MP-2017 scale.
- Investment loss During the fiscal year ending 6/30/2018 the actual return on assets was 6.37% vs. an expected return of 7.5%.

Lansing Board of Water and Light

Post-Retirement Benefit Plan for Eligible Employees

June 30, 2019 GASB 74/75 Actuarial Valuation Report July 12, 2019



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Table of Contents

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Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Executive Summary

Governmental accounting requirements and purpose of this report

The Governmental Accounting Standards Board Statements No. 74 and No. 75 require trusts (GASB 74) and employers (GASB 75) to accrue the cost associated with other post-employment benefits ("OPEB") while eligible employees are providing services to the employer. Lansing Board of Water and Light (the "Board") adopted GASB 74/75 for the fiscal year ending June 30, 2018.

The purpose of this actuarial valuation report is to provide the Board with:

- 1) The amount of accrued liability related to the Board's OPEB plan (Net OPEB Liability) using the most recent census data, discount rate and healthcare trend rates;
- 2) Projected cash contributions (pay-as-you-go costs); and
- 3) The GASB 74/75 expense and disclosure information needed to fulfill the Board's financial reporting requirements for the current fiscal year.

Key measures for the prior and current fiscal years		6/30/2018		6/30/2019
Active participants		703		690
Retired participants		728		745
Total		1,431		1,435
Present value of future benefits (PVFB)	\$	249,467,429	\$	180,017,135
Total OPEB liability (TOL)	\$	203,487,065	\$	148,549,677
Fiduciary net position (FNP)		184,039,624		195,158,575
Net OPEB liability (NOL)		19,447,441		(46,608,898)
Funded ratio		90.44%		131.38%
OPEB expense	\$	5,316,416	\$	(6,226,213)
Expected contributions in upcoming fiscal year	\$	11,130,712	\$	9,644,676
Key assumptions				
Census date		2/28/2018		2/28/2019
Valuation date		6/30/2018		6/30/2019
Measurement date		6/30/2018		6/30/2019
Discount rate		7.50%		7.50%
Healthcare trend rates				
Year 1		9.00%		8.50%
Year 2		8.50%		8.25%
Ultimate		5.00%		4.50%
Year ultimate trend rate is achieved		2027		2035
Actuarial cost method	Er	try Age Normal	Er	try Age Normal



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Executive Summary (continued)

Discount rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA/Aa credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 7.50%; the municipal bond rate is 3.50% (based on the daily rate closest to but not later than the measurement date of the Bond Buyer "20-Bond GO Index"); and the resulting Single Discount Rate is 7.50%.

The projection of cash flows used to determine the discount rate assumes that Lansing Board of Water and Light will make contributions equal to at least the annual "pay as you go cost". Based on this assumption, the OPEB plan's fiduciary net position is projected to cover all future OPEB payments. Therefore, we determined the discount rate to be the long-term expected rate of return on OPEB plan investments.

Assumption and method changes since the prior valuation

(1) The mortality assumption was changed to the PUBH-2010 General Employees Mortality Table, Male and Female, projected generationally using the MP-2018 mortality improvement scale; (2) The medical and prescription drug trend rates were changed to those prescribed under the Michigan Uniform Assumptions for the 2019 fiscal year and; (3) The assumed Medicare Part B premium reimbursement was increased from \$1,176 per year to \$1,464 per year for participants who became Medicare eligible prior to January 1, 2016.

Plan provision changes since the prior valuation - The retiree contribution percentage for employees hired on or after January 1, 2009 was increased from 14% to 20%.

Funding policy

Currently, the Board pays the annual pay-as-you-go cost from general assets to fund this obligation.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Actuarial Certification

July 12, 2019

This report presents actuarial and accounting results related to the Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees (the "Plan"). Results herein were prepared pursuant to Governmental Accounting Standards Board Statements 74 and 75 ("GASB 74/75").

The primary purpose of this report is to provide financial statement information pursuant to GASB 74/75 for the fiscal year ending June 30, 2019. The results of our calculations are set forth in this report, as are the actuarial assumptions and methods and a brief summary of the eligibility criteria and benefits for retirees.

To the best of our knowledge, the information supplied in this report is complete and accurate. The analysis and calculations were conducted in a manner consistent with the Standards of Professional Conduct, Qualifications, and Practice of the American Academy of Actuaries and consistent with the standards of practice of the Actuarial Standards Board.

All costs, liabilities, rates of interest, and other factors under the Plan have been determined on the basis of actuarial assumptions and methods which are reasonable and consistent with our understanding of GASB 74/75. All assumptions have been discussed with the Lansing Board of Water and Light and appear to represent the best estimate of anticipated experience under the Plan. In preparing this report we relied on the census data, plan provisions, and other plan financial information provided by the Lansing Board of Water and Light. Actuarial computations under GASB 74/75 are for purposes of fulfilling employer financial accounting requirements. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results contained in this report.

Respectfully Submitted,

ah W Mille

Mark W. Miller, ASA, EA, MAAA, FCA Benassist Retirement Consulting, LLC

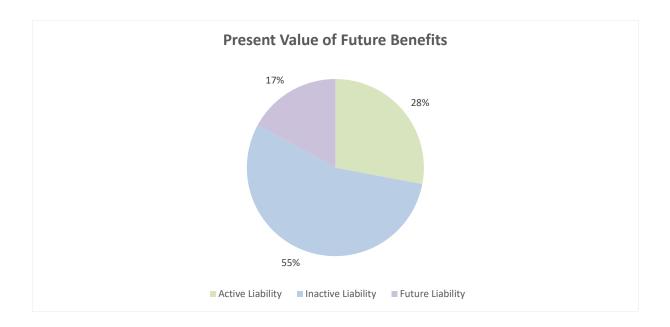


Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Summary of Key Results

		6/30/2018	6/30/2019
Census data summary			
Active participants		703	690
Retired participants		728	 745
Total		1,431	1,435
Covered payroll	\$	55,650,345	\$ 56,785,166
Present value of future benefits (PVFB)			
Active participants	\$	116,983,491	\$ 80,495,983
Retired participants		132,483,938	 99,521,152
Total	\$	249,467,429	\$ 180,017,135
Present value of future normal costs (PVFNC)	\$	45,980,364	\$ 31,467,458
Total OPEB Liability (TOL)			
Active participants	\$	71,003,127	\$ 49,028,525
Retired participants		132,483,938	 99,521,152
Total	<u>\$</u>	203,487,065	\$ 148,549,677
Fiduciary net position (FNP)	\$	184,039,624	\$ 195,158,575
Net OPEB liability (NOL)	\$	19,447,441	\$ (46,608,898)
Funded status		90.44%	131.38%
OPEB expense	\$	5,316,416	\$ (6,226,213)
Contribution			
Actuarially determined contribution	\$	7,534,978	\$ 7,030,548
Actuarially determined contribution as a % payroll		13.54%	12.63%



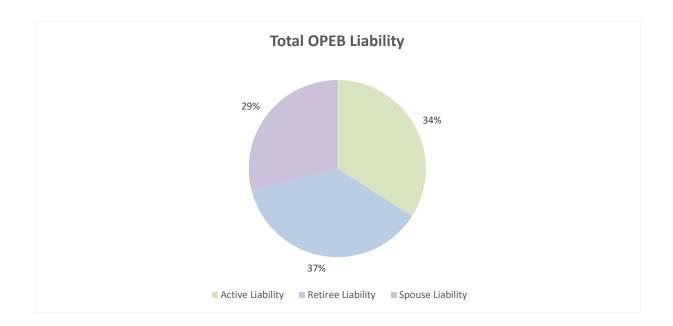
Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Present Value of Future Benefits



	6/30/2018	6/30/2019
Present value of future benefits		
Active participants	\$ 116,983,491	\$ 80,495,983
Inactive participants		
Retirees	\$ 79,628,580	\$ 56,378,445
Spouses	 52,855,358	 43,142,707
Total inactive	132,483,938	99,521,152
Total	\$ 249,467,429	\$ 180,017,135
Fiduciary net position (FNP)	\$ 184,039,624	\$ 195,158,575
Unfunded present value of future benefits (surplus)	\$ 65,427,805	\$ (15,141,440)
Funded ratio	73.77%	108.41%
Discount rate	7.50%	7.50%



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Total OPEB Liability



	6/30/2018	6/30/2019
Total OPEB liability		
Active participants	\$ 71,003,127	\$ 49,028,525
Inactive participants		
Retirees	\$ 79,628,580	\$ 56,378,445
Spouses	 52,855,358	 43,142,707
Total inactive	132,483,938	99,521,152
Total	\$ 203,487,065	\$ 148,549,677
Fiduciary net position (FNP)	\$ 184,039,624	\$ 195,158,575
Net OPEB liability (NOL)	\$ 19,447,441	\$ (46,608,898)
Funded ratio	90.44%	131.38%
Service cost	\$ 4,402,631	\$ 3,018,229
Discount rate	7.50%	7.50%



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Statement of Fiduciary Net Position

	6/30/2018	6/30/2019
Assets		
Cash and deposits	\$ 1,985,712	\$ 3,437,276
Receivables		
Contributions	0	0
Due from broker for investments sold	0	1,539
Net receivable on investments	 404,369	 261,067
Total receivables	\$ 404,369	\$ 262,606
Investments		
U.S. government and agencies	26,527,961	18,994,138
Corporate bonds and notes	34,748,141	20,108,406
U.S. common stocks	47,069,542	52,083,683
Common collective fund - other	0	9,825,815
Mutual funds	72,109,667	75,437,370
Real estate	 1,348,617	 15,084,868
Total investments	\$ 181,803,928	\$ 191,534,280
Total assets	\$ 184,194,009	\$ 195,234,162
Liabilities		
Payables:		
Investment management fees	\$ 0	\$ 0
Due to broker for investments purchased	 (154,385)	 (75,587)
Total payables	\$ (154,385)	\$ (75,587)
Total liabilities	\$ (154,385)	\$ (75,587)
Net position restricted for OPEBs	\$ 184,039,624	\$ 195,158,575

Investment Policy - A detailed description of the investment policy for the plan can be found in the Trust Agreement for Post-Retirement Benefit Plan for Eligible Employees of Lansing Board of Water and Light.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Statement of Changes in Fiduciary Net Position

	6/30/2018	6/30/2019
Additions		
Contributions		
Employer	\$ 10,395,327	\$ 9,277,538
Employee	 0	 0
Total contributions	\$ 10,395,327	\$ 9,277,538
Investment income		
Net increase in fair value of investments	\$ 6,742,518	\$ 7,052,499
Interest and dividends	4,296,385	4,635,052
Less investment expense	 0	 0
Net investment income	\$ 11,038,903	\$ 11,687,551
Total additions	\$ 21,434,230	\$ 20,965,089
Deductions		
Benefit payments	\$ (10,395,327)	\$ (9,277,538)
Administrative expenses	 (634,336)	 (568,600)
Total deductions	\$ (11,029,663)	\$ (9,846,138)
Net increase in net position	\$ 10,404,567	\$ 11,118,951
Net position restricted for OPEBs		
Beginning of year	\$ 173,635,057	\$ 184,039,624
End of year	\$ 184,039,624	\$ 195,158,575



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Changes in the Net OPEB Liability

	Increase (Decrease)					
-		Total OPEB Liability (a)		Fiduciary Net Position (b)		Net OPEB Liability (a)-(b)
Balances at 6/30/2018	\$	203,487,065	\$	184,039,624	\$	19,447,441
Changes for the year						
Service cost		4,402,631		0		4,402,631
Interest		14,919,912		0		14,919,912
Change of benefit terms		(414,594)		0		(414,594)
Differences between expected and actual experience		(5,231,311)		0		(5,231,311)
Changes in assumptions or other inputs		(59,336,488)		0		(59,336,488)
Contributions - employer		0		9,277,538		(9,277,538)
Contributions - retiree		0		0		0
Net investment income		0		11,687,551		(11,687,551)
Benefit payments and refunds of employee contributions		(9,277,538)		(9,277,538)		0
Administrative expense		0		(568,600)		568,600
Other changes		0		0		0
Net changes	\$	(54,937,388)	\$	11,118,951	\$	(66,056,339)
Balances at 6/30/2019	\$	148,549,677	\$	195,158,575	\$	(46,608,898)

<u>Note</u>

The Net OPEB Liability (NOL) is equal to the Total OPEB Liability (TOL) minus the Fiduciary Net Position (FNP), or market value of assets. OPEB Expense includes amounts for: service cost, interest on the TOL, changes in the benefit structure, recognition of increases/decreases in liability due to actual vs. expected experience, actuarial assumption changes, investment gains/losses on the market value of assets and expected return on plan assets. The impact of actual experience and assumption changes are recognized over the average expected remaining service life of the plan participants, while investment gains/losses are recognized equally over five years.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Schedule of Changes in the Net OPEB Liability

6/30/2019 6/30/2018 6/30/2017 **Total OPEB liability** Service cost 4.402.631 \$ 4.826.401 \$ 3.130.487 \$ Interest 14,919,912 15.039.052 14.226.364 Change of benefit terms (414,594) 0 0 Differences between expected and actual experience (5,231,311)(9,879,514) 5,280,548 Change in assumptions or other inputs (59, 336, 488)(1,727,939)(2,027,643)Benefit payments (9,277,538)(10, 395, 327)(9,573,671)Refunds of contributions 0 0 0 (54, 937, 388)\$ (2, 137, 327)11,036,085 Net change in total OPEB liability \$ \$ 203,487,065 205,624,392 194,588,307 Total OPEB liability - beginning \$ 148,549,677 \$ 203,487,065 \$ 205,624,392 Total OPEB liability - ending (a) Fiduciary net position Contributions - employer \$ 9,277,538 10,395,327 \$ 9,573,671 \$ Contributions - non-employer 0 0 0 Contributions - member 0 0 0 11.687.551 11.038.903 18.039.508 Net investment income Benefit payments (9,277,538)(10,395,327)(9,573,671)Administrative expense (568, 600)(634, 336)(704, 793)Refunds of contributions 0 0 0 Other 0 0 0 11.118.951 10.404.567 17.334.715 Net change in fiduciary net position 184,039,624 173,635,057 156,300,342 Fiduciary net position - beginning 195,158,575 184,039,624 173,635,057 Fiduciary net position - ending (b) \$ \$ Net OPEB liability - ending (a)-(b) (46,608,898)19,447,441 31,989,335 \$ \$ Plan fiduciary net position as a percentage of the total OPEB liability 131.38% 90.44% 84.44% Covered payroll 56,785,166 55,650,345 54,382,507 Net OPEB liability as a percentage of covered payroll -82.08% 34.95% 58.82%



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Development of Net OPEB Liability (Gain)/Loss

	6/30/2018	6/30/2019
Total OPEB liability		
Total OPEB liability at BOY	\$ 205,624,392	\$ 203,487,065
Service cost	4,826,401	4,402,631
Benefit payments	(10,395,327)	(9,277,538)
Expected interest	15,039,052	14,919,912
Assumption change	(1,727,939)	(59,336,488)
Plan change	 0	 (414,594)
Expected total OPEB liability at EOY	213,366,579	153,780,988
Actual total OPEB liability at EOY	203,487,065	148,549,677
Total OPEB liability (gain)/loss	\$ <u>(9,879,514)</u>	\$ (5,231,311)
Fiduciary net position		
Fiduciary net position at BOY	\$ 173,635,057	\$ 184,039,624
Employer contributions	10,395,327	9,277,538
Employee contributions	0	0
Benefit payments	(10,395,327)	(9,277,538)
Administrative expenses	(634,336)	(568,600)
Expected net investment income	 12,999,272	 13,782,035
Expected fiduciary net position at EOY	185,999,993	197,253,059
Actual fiduciary net position at EOY	184,039,624	195,158,575
Fiduciary net position (gain)/loss	\$ 1,960,369	\$ 2,094,484
Net OPEB liability (gain)/loss	\$ (7,919,145)	\$ (3,136,827)

<u>Note</u>

Notes for the FYE June 30, 2019 shown above are provided on page 14.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Notes to Schedule of Changes in the Net OPEB Liability

June 30, 2019

- Difference between actual and expected experience The \$5.2MM gain on the Total OPEB Liability for the fiscal year ending June 30, 2019 is primarily due to favorable demographic experience. The favorable experience is mainly attributable to terminations of active participants and deaths of participants with and without beneficiaries.
- Assumption changes (1) The plan experienced a \$54.4MM gain on the Total OPEB Liability due to a change of the assumed per capita claims cost. The Board changed the plan's insurance provider for Medicare eligible participants from The Hartford and EnvisionInsurance to Humana. Doing so resulted in a dramatic decrease in both the medical and prescription drug monthly premiums from the prior fiscal year (\$98.99 per month vs. \$219.54 per month for medical coverage and \$213.47 per month vs. \$305.00 per month for prescription drug coverage); (2) The plan experienced a \$3.8MM loss on the mortality assumption change. The mortality assumption was updated from the RPH-2014 Total Dataset mortality, adjusted to 2006 and projected generationally using the MP-2017 improvement scale to the PUBH-2010 General Employees mortality, projected generationally using the MP-2018 improvement scale; and (3) The plan experience a \$8.7MM gain on a change to the medical and prescription drug trend assumptions. The trend assumptions were changed to those prescribed under the Michigan Uniform Assumptions for the 2019 fiscal year.
- Change in benefit terms The plan experienced a \$.4MM gain due to an increase in the retiree contribution
 percentage for employees hired on or after January 1, 2009. The contribution percentage was increased
 from 14% to 20% of the premium charged to active employees.
- Investment loss During the fiscal year ending 6/30/2019 the actual return on assets was 6.36% vs. an expected return of 7.5%.

June 30, 2018

- Difference between actual and expected experience The 9.9 million dollar gain on the Total OPEB Liability
 for the fiscal year ending June 30, 2018 is attributable to a reduction in the per capita claims cost used in
 the 6/30/2018 valuation. Better than expected claims experience during the fiscal year resulted in a
 decrease in the projected claims when compared to those used in the 6/30/2017 valuation.
- Assumption change The mortality improvement scale was updated to the MP-2017 scale.
- Investment loss During the fiscal year ending 6/30/2018 the actual return on assets was 6.37% vs. an expected return of 7.5%.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Sensitivity Analysis

Sensitivity of the net OPEB liability to changes in the discount rate - The following presents the net OPEB liability, calculated using the discount rate of 7.5%, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower (6.5%) or 1-percentage point higher (8.5%) than the current rate:

	 1% Decrease (6.5%)	 Current Discount Rate (7.5%)	1% Increase (8.5%)		
Net OPEB liability (asset)	\$ (30,506,982)	\$ (46,608,898)	\$	(60,250,506)	

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates - The following presents the net OPEB liability as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage point lower or 1-percentage point higher than the current healthcare cost trend rates:

		1% Decrease	 Current Rates	1% Increase			
Net OPEB liability (asset)	\$	(61,585,517)	\$ (46,608,898)	\$	(28,613,760)		



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report OPEB Expense

	6/30/2018	6/30/2019
Service cost with interest	\$ 4,826,401	\$ 4,402,631
Interest on the total OPEB liability	15,039,052	14,919,912
Change of benefit terms	0	(414,594)
Expensed portion of current-period difference between expected and actual experience in the total OPEB liability	(1,548,513)	(822,805)
Expensed portion of current-period changes in assumptions	(270,837)	(9,332,718)
Expensed portion of current-period difference between expected and actual earnings on plan investments	392,074	418,897
Employee contributions	0	0
Expected earnings on OPEB plan investments	(12,999,272)	(13,782,035)
Administrative expenses	634,336	568,600
Recognition of deferred inflows	(1,569,217)	(3,388,567)
Recognition of deferred outflows	 812,392	 1,204,466
OPEB Expense	\$ 5,316,416	\$ (6,226,213)
Census date	2/28/2018	2/28/2019
Measurement date	6/30/2018	6/30/2019
Reporting date	6/30/2018	6/30/2019
Discount rate	7.50%	7.50%
Expected Return on Assets	7.50%	7.50%

Note

GASB 75 was formally adopted for the fiscal year ending June 30, 2018.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Deferred Inflows and Outflows

The following table provides a summary of the deferred inflows and outflows as of 6/30/2019.

	 red Outflows Resources	 ferred Inflows f Resources
Differences between expected and actual experience	\$ 2,843,372	\$ (11,190,994)
Changes of assumptions or other inputs	0	(52,281,843)
Net difference between projected and actual earnings on plan investments	 2,851,809	 (2,514,545)
Total	\$ 5,695,181	\$ (65,987,382)

Collective amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense in future years as follows:

Year Ended June 30	Deferred Outflows of Resources			
2020	\$	1,623,363	\$	(13,544,090)
2021		1,623,363		(13,544,091)
2022		1,623,362		(12,286,818)
2023		825,093		(12,130,846)
2024		0		(10,846,876)
Thereafter		0		(3,634,661)



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Amortization Schedule

Date Established	Description		Initial Amount	Outstanding Balance	Years aining		2019 Installment
6/30/2017	Actuarial (Gain)/Loss	\$	5,280,548	\$ 2,843,372	 3.50	\$	812,392
6/30/2018	Actuarial (Gain)/Loss		(9,879,514)	(6,782,488)	4.38		(1,548,513)
6/30/2019	Actuarial (Gain)/Loss		(5,231,311)	 (4,408,506)	5.36		(822,805)
Total				\$ (8,347,622)		\$	(1,558,926)
6/30/2017 6/30/2018 6/30/2019 Total	Assumption Change Assumption Change Assumption Change	\$	(2,027,643) (1,727,939) (59,336,488)	\$ (1,091,808) (1,186,265) (50,003,770) (52,281,843)	3.50 4.38 5.36	\$	(311,945) (270,837) <u>(9,332,718</u>) (9,915,500)
6/30/2017 6/30/2018 6/30/2019 Total	Investment (Gain)/Loss Investment (Gain)/Loss Investment (Gain)/Loss	\$	(6,286,361) 1,960,369 2,094,485	\$ (2,514,545) 1,176,221 <u>1,675,588</u> 337,264	2.00 3.00 4.00	\$ \$	(1,257,272) 392,074 <u>418,897</u> (446,301)



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Rate of Return

The long-term expected rate of return on plan investments was determined using a building-block method where expected future real rates of return (expected returns, net of plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the VEBA plan's target asset allocation as of June 30, 2019 are summarized in the following table:

Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return
Core bonds	15.00%	2.62%
Multi-sector	5.00%	3.49%
Liquid absolute return	5.00%	3.75%
U.S. large cap equity	30.00%	7.21%
U.S. small cap equity	10.00%	8.42%
Non-U.S. equity	20.00%	8.34%
Core real estate	8.00%	6.78%
Value add RE	7.00%	7.29%
Total	100.00%	

<u>Notes</u>

(1) The amounts shown above were provided ACG Asset Consulting Group.

(2) The Long-Term Expected Real Rate of Return equals the Long-Term Arithmetic Average Nominal Return minus an average annual inflation rate of 2.75%.

(3) The long-term expected rate of return for the June 30, 2019 measurement date is 7.50%.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Actuarially Determined Contribution

	FYE 6/30/2019	FYE 6/30/2020
Normal cost	\$ 4,732,828	\$ 3,244,596
Actuarial accrued liability (beginning of year)	203,487,065	148,549,677
Market value of assets (beginning of year)	184,039,624	195,158,575
Unfunded actuarial accrued liability	19,447,441	(46,608,898)
Net amortization charges / (credits)	1,546,716	(3,746,280)
Interest to the end of year	116,004	(280,971)
Administrative expenses	635,000	569,000
Actuarially determined contribution	\$ 7,030,548	\$ 0
Expected benefit disbursements	\$ 11,130,712	\$ 9,644,716
Covered payroll	\$ 55,650,345	\$ 56,785,166
Percentage of covered payroll	12.63%	0.00%
Discount rate	7.50%	7.50%
Amortization period	29 Years	28 Years
	Closed	Closed

<u>Note</u>

For the FYE June 30, 2019, administrative expenses are assumed to equal the expenses for the prior year rounded up to the next \$1,000.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Schedule of Contributions

	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011
Actuarially determined employer contribution	\$ 7,030,548	\$ 7,534,978	\$ 7,507,689	\$ 5,787,960	\$ 5,762,462	\$ 9,199,669	\$ 13,993,843	\$ 15,774,370	\$ 17,298,696
Actual employer contributions	\$ 9,277,538	\$ 10,395,327	\$ 9,573,671	\$ 9,423,081	\$ 9,670,794	\$ 9,268,334	\$ 14,045,204	\$ 15,854,530	\$ 17,236,375
Annual contribution deficiency (excess)	\$ (2,246,990)	\$ (2,860,349)	\$ (2,065,982)	\$ (3,635,121)	\$ (3,908,332)	\$ (68,665)	\$ (51,361)	\$ (80,160)	\$ 62,321
Covered payroll	\$ 56,785,166	\$ 55,650,345	\$ 54,382,507	\$ 53,892,858	\$ 50,885,058	\$ 46,971,463	\$ 47,467,921	\$ 46,885,031	\$ 47,212,633
Actual contributions as a percentage of covered payroll	16.34%	18.68%	17.60%	17.48%	19.01%	19.73%	29.59%	33.82%	36.51%

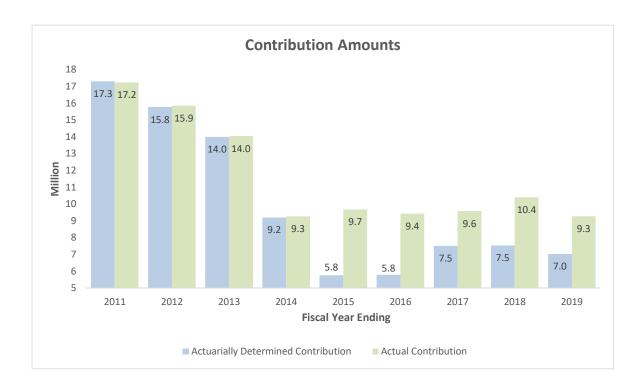
Notes

(1) Pursuant to GASB 74/75, a 10-year history of the above information is required. However, until a full 10-year history is compiled, information for those years which are available may be presented.
 (2) The actual employer contributions for fiscal years 2017 through 2019 include employer contributions for pay as you go cost paid from the General Fund and pre-funding contributions deposited into the OPEB Trust.

(3) LBWL contributed the pay as you go cost for fiscal years 2017 through 2019.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Historical Contributions



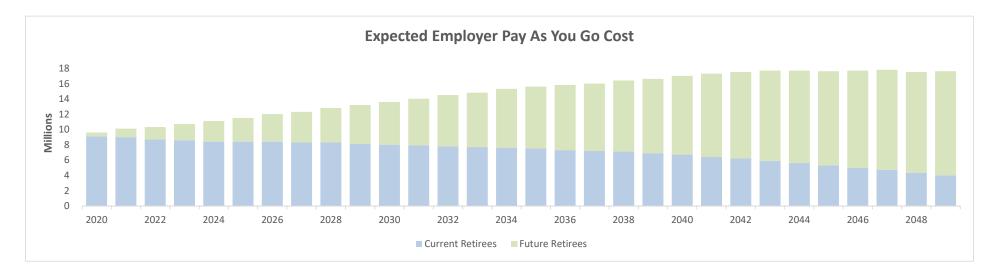
Fiscal Year Ending	Actuarially Determined Contribution	Contribution Deficiency (Excess)	
2011	\$ 17,298,696	\$ 17,236,375	\$ 62,321
2012	15,774,370	15,854,530	(80,160)
2013	13,993,843	14,045,204	(51,361)
2014	9,199,669	9,268,334	(68,665)
2015	5,762,462	9,670,794	(3,908,332)
2016	5,787,960	9,423,081	(3,635,121)
2017	7,507,689	9,573,671	(2,065,982)
2018	7,534,978	10,395,327	(2,860,349)
2019	7,030,548	9,277,538	(2,246,990)

Notes

(1) The actual employer contributions for fiscal years 2017 through 2019 include employer contributions for pay as you go cost paid from the General Fund and pre-funding contributions deposited into the OPEB Trust.(2) LBWL contributed the pay as you go cost for fiscal years 2017 through 2019.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Expected Employer Pay As You Go Cost



FYE	Current Retirees	Future Retirees	Total	FYE	Current Retirees	Future Retirees	Total	FYE	Current Retirees		Future Retirees	Total
2020	\$ 9,122,419	\$ 522,257	\$ 9,644,676	2030	\$ 8,016,261	\$ 5,552,944	\$ 13,569,205	2040	\$ 6,651,020	\$	10,271,507	\$ 16,922,527
2021	8,970,668	1,073,176	10,043,844	2031	7,900,969	6,086,626	13,987,595	2041	6,427,282		10,861,104	17,288,386
2022	8,728,948	1,570,204	10,299,152	2032	7,789,493	6,693,195	14,482,688	2042	6,182,368		11,341,215	17,523,583
2023	8,568,510	2,144,740	10,713,250	2033	7,665,948	7,123,367	14,789,315	2043	5,871,499		11,755,309	17,626,808
2024	8,449,455	2,657,441	11,106,896	2034	7,564,769	7,652,532	15,217,301	2044	5,587,606		12,090,005	17,677,611
2025	8,421,134	3,068,692	11,489,826	2035	7,497,867	8,140,351	15,638,218	2045	5,290,024		12,318,239	17,608,263
2026	8,390,165	3,614,961	12,005,126	2036	7,336,887	8,474,388	15,811,275	2046	4,981,220		12,663,454	17,644,674
2027	8,277,412	4,020,103	12,297,515	2037	7,213,614	8,845,191	16,058,805	2047	4,664,061		13,076,215	17,740,276
2028	8,280,788	4,511,043	12,791,831	2038	7,065,361	9,262,276	16,327,637	2048	4,342,389		13,241,101	17,583,490
2029	8,147,559	5,103,272	13,250,831	2039	6,852,628	9,676,148	16,528,776	2049	4,019,560		13,628,267	17,647,827



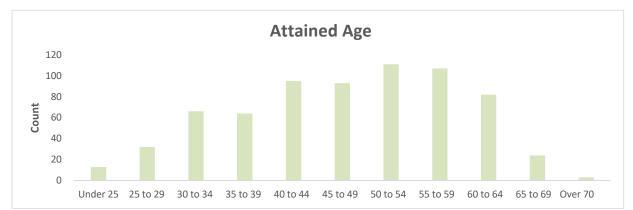
Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Data Summary - Active Participants

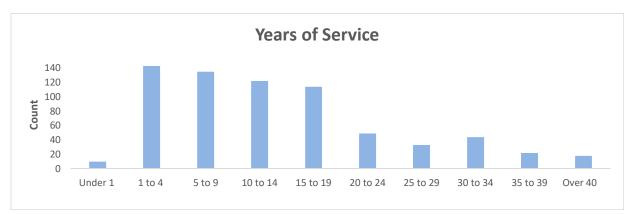
	6/30/2018	6/30/2019
Medical coverage		
Participant count - single coverage	122	130
Participant count - non-single coverage	 519	 496
Total	641	626
Average age	47.9	47.7
Average past service	14.6	14.1
Average future service	13.7	14.0
Covered payroll	\$ 50,816,709	\$ 51,594,906
Average compensation	\$ 79,277	\$ 82,420
Cash in lieu		
Participant count	48	50
Average age	45.8	46.4
Average past service	12.1	11.2
Average future service	16.1	15.8
Covered payroll	\$ 3,805,409	\$ 4,146,324
Average compensation	\$ 79,279	\$ 82,926
Waived coverage		
Participant count	14	14
Average age	46.1	41.1
Average past service	13.6	11.8
Average future service	14.6	18.5
Covered payroll	\$ 1,028,227	\$ 1,043,936
Average compensation	\$ 73,445	\$ 74,567
Total		
Participant count	703	690
Average age	47.7	47.5
Average past service	14.4	13.9
Average future service	13.8	14.2
Covered payroll	\$ 55,650,345	\$ 56,785,166
Average compensation	\$ 79,161	\$ 82,297



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Age & Service Distribution - Active Participants

	Years of Service										
Attained Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Over	Total
Under 25	1	7	5								13
25 to 29	2	19	9	2							32
30 to 34	1	26	33	6							66
35 to 39	1	20	20	17	6						64
40 to 44	1	23	20	26	21	4					95
45 to 49		14	20	17	27	12	3				93
50 to 54	2	20	12	14	21	19	16	7			111
55 to 59	2	10	11	23	18	6	8	22	6	1	107
60 to 64		3	5	9	20	3	6	12	13	11	82
65 to 69		1		8	1	4		3	2	5	24
70+						1			1	1	3
Total	10	143	135	122	114	49	33	44	22	18	690







Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Data Summary - Inactive Participants

	6/30/2018	6/30/2019
Medical coverage		
Retirees		
Participant count - single coverage	144	138
Participant count - non-single coverage	314	337
Total	458	475
Average age	71.4	71.4
Disabled		
Participant count - single coverage	29	25
Participant count - non-single coverage	47	51
Total	76	76
Average age	67.2	68.1
Surviving spouses		
Participant count - single coverage	123	118
Participant count - non-single coverage	8	6
Total	131	124
Average age	78.3	78.3
Total		
Participant count - single coverage	296	281
Participant count - non-single coverage	369	394
Total	665	675
Average age	72.3	72.3
Cash in lieu		
Participant count	41	39
Average age	74.0	74.1
Waived coverage		
Retirees		
Participant count	8	9
Average age	66.6	66.3
Disabled		
Participant count	1	2
Average age	53.0	55.0
Surviving spouses		
Participant count	13	20
Average age	72.2	76.4
Total		
Participant count	22	31
Average age	69.3	72.1
5 5		



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Age Distribution - Inactive Participants

Attained Age	Retired	Disabled	Surviving Spouse	Total
Under 50			<u></u>	1
50 to 54	3	2	2	7
55 to 59	21	7	3	31
60 to 64	91	19	9	119
65 to 69	118	21	17	156
70 to 74	125	15	25	165
75 to 79	75	7	25	107
80 to 84	44	5	17	66
85 to 89	27	2	16	45
90 & Over	19		29	48
Total	523	78	144	745



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Census Data Reconciliation

	Active	Retired	Surviving Spouse	Disabled	Total
February 28, 2018	703	506	145	77	1,431
Terminations	(22)	0	0	0	(22)
Part time - not eligible	0	0	0	0	0
Retirements	(34)	34	0	0	0
Disabled	(3)	0	0	3	0
Deceased with beneficiary	0	(9)	10	(1)	0
Deceased without beneficiary	(1)	(8)	(11)	(1)	(21)
New entrants	47	0	0	0	47
Rehires	0	0	0	0	0
Data corrections	0	0	0	0	0
February 28, 2019	690	523	144	78	1,435



Cost Method - Individual entry age normal level percent of salary.

Dates of Calculations Actuarial valuation date: June 30, 2019 Census date: February 28, 2019 Measurement date GASB 74 and GASB 75: June 30, 2019 Reporting date GASB 74 and GASB 75: June 30, 2019

Employees Included in the Calculations - All active employees who are potentially eligible to receive healthcare benefits as a retiree. Retirees (healthy and disabled) and their spouses or their survivors who are receiving benefits.

Source of Data - Data is as of the valuation date and was supplied by the Lansing Board of Water and Light. While we have not audited this data, we believe the census data and financial information to be accurate and complete.

Discount Rate - Pursuant to GASB 74/75, projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA/Aa credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on OPEB plan investments is 7.50%; the municipal bond rate is 3.50% (based on the daily rate closest to but not later than the measurement date of the Bond Buyer "20-Bond GO Index"); and the resulting Single Discount Rate is 7.50%.

The projection of cash flows used to determine the discount rate assumes that the Lansing Board of Water and Light will make contributions equal to at least the annual "pay as you go cost". Based on this assumption, the OPEB plan's fiduciary net position is projected to cover all future OPEB payments. Therefore, we determined the discount rate to be the long-term expected rate of return on OPEB plan investments.

Inflation Rate - 3.00% per year.

Salary Increase Rates - Sample rates are listed on Table A herein. The rates include general wage inflation and merit / productivity increases.

Mortality Rates - Pre and Post retirement - PUBH-2010 General Employees Mortality Table, Male and Female, projected generationally using the MP-2018 improvement scale.

Retirement Rates - The retirement rates are based on Lansing Board of Water and Light historical experience from 2012 to 2016 that was used in the February 2017 experience study. Sample rates are listed on Table B herein.

Termination Rates - The termination rates are based on Lansing Board of Water and Light historical experience from 2012 to 2016 that was used in the February 2017 experience study. Sample rates are listed on Table C herein.

Disability Rates - The 1985 Pension Disability Incidence Class 1 rates for males and females. Sample rates are listed on Table D herein.

Per Capita Claims Costs - Annual per capita costs are based on the premiums in effect on January 1, 2019 and are actuarially increased using current enrollment and aging factors. In addition, these costs are assumed to increase with medical, prescription drug and dental trend rates. Aging factors and sample per capita claims costs are shown on Tables E and F herein.

Healthcare Trend - Sample healthcare trend rates are shown on Table G herein.



Retiree Contributions - The 2019 retiree contributions shown in the plan provisions of this report are assumed to increase according to the healthcare trend rates.

Medicare Part B Reimbursement - It is assumed that the annual Medicare Part B reimbursement amount is \$1,464 for the current valuation. This amount is assumed to increase with the Medicare Part B trend rates.

Election Percentage - Ninety five percent (95%) of active employees who currently have healthcare coverage are assumed to elect coverage at retirement. Ninety five percent (95%) of active employees who currently elect cash in lieu of healthcare coverage are assumed to make the same election at retirement. All active employees who currently waive coverage are assumed to waive coverage at retirement. One hundred percent (100%) of retirees who currently have healthcare coverage are assumed to continue coverage until death. One hundred percent (100%) of retirees who currently elect cash in lieu of healthcare coverage are assumed to make the same election until death. All retirees who currently waive coverage are assumed to never elect coverage with the Lansing Board of Water and Light. All employees who currently have \$10,000 of life insurance coverage are assumed to never purchase additional insurance and thus are not eligible for retiree life insurance coverage.

Marriage Percentage - It is assumed that 65% of active employees are married upon retirement. Husbands are assumed to be three years older than wives.

Assumption Changes - (1) The mortality assumption was changed to the PUBH-2010 General Employees Mortality Table, Male and Female, projected generationally using the MP-2018 mortality improvement scale; (2) The medical and prescription drug trend rates were changed to those prescribed under the Michigan Uniform Assumptions for the 2019 fiscal year and; (3) The assumed Medicare Part B premium reimbursement was increased from \$1,176 per year to \$1,464 per year for participants who became Medicare eligible prior to January 1, 2016.



Table A - Salary Increase Rates

Age	Rate
25	9.30%
30	8.70%
35	8.20%
40	7.80%
45	7.50%
50	7.20%
55	6.90%
60+	6.40%

Table B - Retirement Rates

Age	Rate	Age	Rate
50	5.00%	61	25.00%
51	3.00%	62	30.00%
52	3.00%	63	15.00%
53	3.00%	64	20.00%
54	6.00%	65	20.00%
55	10.00%	66	50.00%
56	7.00%	67	25.00%
57	7.00%	68	25.00%
58	7.00%	69	25.00%
59	15.00%	70	100.00%
60	15.00%		

Table C - Termination Rates

4	
4	5+
7.00%	4.80%
4.40%	2.50%
3.50%	1.90%
3.00%	1.60%
2.60%	1.20%
2.20%	0.90%
	2.60%



Table D - Disability Rates

Age	Male	Female
20	0.03%	0.03%
30	0.05%	0.08%
40	0.12%	0.21%
50	0.36%	0.53%
60	1.26%	1.16%

Table E - Aging Factors

Age	Medical	Rx
35 – 39	2.00%	5.00%
40 – 44	2.00%	4.50%
45 – 49	2.00%	4.00%
50 – 54	2.00%	3.50%
55 – 59	4.00%	3.00%
60 - 64	4.00%	2.50%
65 – 69	3.00%	1.50%
70 – 74	2.00%	1.00%
75 – 79	1.00%	0.00%
80+	0.00%	0.00%

Table F - Per Capita Claims Cost

	Healthy Retirees							Disabl	ed Retirees	;		
Age	Ν	ledical	_	Rx		Dental	Ν	/ledical		Rx	D	ental
50	\$	7,066	\$	2,880	\$	497	\$	15,897	\$	6,480	\$	497
55		7,801		3,420		497		17,553		7,695		497
60		9,492		3,964		497		21,356		8,918		497
65		993		2,422		497		993		2,422		497
70		1,151		2,609		497		1,151		2,609		497
75		1,271		2,741		497		1,271		2,741		497
80+		1,335		2,741		497		1,335		2,741		497

<u>Note</u>

The annual per capita claims shown above are for disabled retirees that are not Medicare primary due to disability. For disabled retirees who are Medicare primary due to disability, the pre-65 annual per capita costs are \$928 for medical coverage and \$2,264 for Rx coverage. 70% of disabled retirees are assumed to be Medicare primary due to disability.



Table G - Healthcare Trend Rates

	Medic	al & Rx		
FYE	Pre-65	Post-65	Part B	Dental
2019	8.50%	7.00%	3.00%	5.00%
2020	8.25%	6.75%	3.25%	4.75%
2021	8.00%	6.50%	3.50%	4.50%
2022	7.75%	6.25%	3.75%	4.25%
2023	7.50%	6.00%	4.00%	4.00%
2024	7.25%	5.75%	4.25%	4.00%
2025	7.00%	5.50%	4.50%	4.00%
2026	6.75%	5.25%	4.75%	4.00%
2027	6.50%	5.00%	5.00%	4.00%
2028	6.25%	4.75%	5.00%	4.00%
2029	6.00%	4.50%	5.00%	4.00%
2030	5.75%	4.25%	5.00%	4.00%
2031	5.50%	4.25%	5.00%	4.00%
2032	5.25%	4.25%	5.00%	4.00%
2033	5.00%	4.25%	5.00%	4.00%
2034	4.75%	4.25%	5.00%	4.00%
2035+	4.50%	4.25%	5.00%	4.00%



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Summary of Plan Provisions

Effective Date - Initial effective date was July 1, 1999. The plan was restated on March 27, 2007.

Eligibility - Employees who satisfy the eligibility requirements for either normal retirement, early retirement, or disability are eligible for lifetime health benefits under the plan.

Normal Retirement Date - The normal retirement date for employees hired prior to July 1, 1990 is the earlier of (1) the first day of the month on or after attainment of age 60 and the completion of at least 10 years of Benefit Service Credit, and (2) the first day of the month on or after completion of 30 years of Benefit Service Credit and attainment of age 55. If an employee who was hired before July 1, 1990 terminates employment after attainment of age 45 and completion of 25 years of Benefit Service Credit, the normal retirement date is the first day of the month on or after the date he has attained age 55 and would have completed 30 years of Benefit Service Credit if he had remained employed.

For employees hired on or after July 1, 1990, the normal retirement date is the first day of the month on or after attainment of age 65 and completion of 10 years of Benefit Service Credit.

Early Retirement Date - The date that is 10 years prior to an employee's Normal Retirement Date upon completion of 25 years of Benefit Service Credit or 5 years prior to an employee's normal retirement date upon completion of 15 years of Benefit Service Credit.

Disability Retirement Date - The date that the employee is determined to be disabled, provided the employee has completed at least 10 years of Years of Service.

Healthcare Coverage - The healthcare coverage (medical, prescription drug and dental) provided under the plan is substantially the same coverage (based on the cost per retiree to the employer for providing said health coverage) that is available to active employees. All health plans are self-insured except for the Medicare plan that is fully-insured with Humana. Dental benefits are fully insured with Delta Dental. Spousal and family coverage is available. In addition, coverage will continue to a surviving spouse upon the death of a retiree or an active employee who is eligible to retire. If an employee with at least ten years of service dies while in employment, the surviving spouse will qualify for retiree healthcare benefits under the disability retirement status. Surviving spouse contributions are the same as the member's prior to the member's death.

Retiree Premiums - The monthly retiree premium rates effective on January 1, 2019 are shown below:

Non-Medicare	Medical Only	Medical & Rx	<u>Dental</u>
1 Person Regular 2 Person Regular 1 Comp. 2 Comp.	\$ 758.17 \$ 1,705.91 \$ 98.99 \$ 197.98	\$ 1,070.13 \$ 2,407.82 \$ 312.46 \$ 624.92	\$41.45 \$76.31 N/A N/A
Medicare Eligible	<u>Medical</u> \$ 98.99	<u> </u>	<u>Dental</u>
1 Person	\$ 98.99	φ Z13.47	\$41.45



Retiree Contributions - Retiree healthcare benefits are non-contributory for employees who were hired prior to January 1, 2009. Retiree healthcare benefits for employees hired on or after January 1, 2009 are contributory. Future retiree contributions for this group will be equal to the current employees' healthcare premium sharing arrangement in effect immediately prior to retirement. Currently, Union and Non-Union employees contribute 20% of the active medical and prescription drug coverage premium and do not contribute for dental coverage. The monthly premiums in effect on January 1, 2019 are shown below:

<u>Coverage</u>	<u>Medical Only</u>	Medical & Rx	<u>Dental</u>		
1 Person Regular	\$ 649.45	\$ 766.33	\$41.45		
2 Person Regular	\$ 1,461.28	\$ 1,724.25	\$76.31		

Medicare Part B Reimbursement - The Lansing Board of Water and Light reimburses retirees and spouses for 90% of the Medicare Part B premium (standard premium prior to income-related adjustment). As of June 30, 2019 the amount of reimbursement is \$122 per month.

Cash in Lieu of Coverage - Retirees may elect to receive cash in lieu of healthcare benefits. Currently, retirees electing this option receive \$2,232 per year.

Life Insurance - Employees that have life insurance coverage equal to 1.5 times of their salary immediately prior to retirement may continue this coverage at one-third of the amount in effect immediately prior to retirement rounded to the next higher \$500. Bargaining unit retirees contribute 50% of the premium for retiree life insurance coverage. Contributions are not required for non-bargaining unit retirees. A closed group of disabled retirees receive retiree life insurance coverage at no cost. Retiree life insurance coverage is not provided for employees who have \$10,000 of life insurance coverage immediately prior to retirement. The monthly retiree life insurance premium in effect on January 1, 2019 is 40 cents per thousand dollars of coverage.

Changes in Plan Provisions since the Prior Valuation - The retiree contribution percentage for employees hired on or after January 1, 2009 was increased from 14% to 20%.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report

Glossary

Actuarial Assumptions - Assumptions relating to future experience under the plan. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- · future increases in salary;
- · future rates of investment earnings and future investment and administrative expenses;
- · characteristics of members not specified in the data, such as marital status;
- · characteristics of future members;
- future elections made by members; and
- · other relevant items.

Actuarial Cost Method - A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Total OPEB Liability (TOL).

Actuarial (Gain) or Loss - A measure of the difference between actual experience and experience expected under a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings that have been forecasted. To the extent that actual experience differs from that assumed, actuarial accrued liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the plan's assets earn more than projected, healthcare trend does not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent - Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV) - The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- adjusted for the probable financial effect of certain intervening events (such as changes in marital status, etc.)
- multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Benefits - The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future benefit increases. The Actuarial Present Value of Future Benefits includes the liabilities for active members, retired members and spouses receiving benefits. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Present Value of Future Earnings - The Actuarial Present Value of a participant's expected future earnings.

Actuarial Present Value of Future Normal Costs - The portion of the Actuarial Present Value of Future Benefits allocated to future years.



Lansing Board of Water and Light Post-Retirement Benefit Plan for Eligible Employees June 30, 2019 GASB 74/75 Actuarial Valuation Report Glossary (continued)

Actuarial Valuation - The determination, as of a valuation date, of the Normal Cost, Total OPEB Liability (TOL), Fiduciary Net Position (FNP), and related Actuarial Present Values for a plan. An Actuarial valuation for a healthcare arrangement typically also includes calculations that provide the financial information of the plan, such as the funded status, unfunded actuarial accrued liability and the contribution amounts.

Actuarially Determined - Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Covered Payroll - Payroll as of the valuation date for active participants who have not attained normal retirement age.

Decrements - Those causes/events due to which a member's status (active-inactive-retiree-spouse) changes, that is: death, retirement, disability, or termination.

Entry Age Normal Cost Method - The EAN cost method is a standard actuarial funding method. The annual cost of benefits under EAN cost method is comprised of two components:

- Normal cost
- Amortization of the unfunded liability

The normal cost is determined on an individual basis, from a member's age at plan entry, and is designed to be a level percentage of pay throughout a member's career.

Fiduciary Net Position - The value of the plan's assets as of a given date, used by the actuary for valuation purposes. This usually equals the market value of plan assets.

Funded Status - The ratio of the Fiduciary Net Position (FNP) to the Total OPEB Liability (TOL).

Net OPEB Liability (NOL) - The excess of the Total OPEB Liability (TOL) over the Fiduciary Net Position (FNP). This value may be negative in which case it may be expressed as a negative Fiduciary Net Position, also called the funding surplus.

Normal Cost - The portion of the Actuarial Present Value of Future Benefits allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an unfunded actuarial accrued liability is not part of Normal Cost. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

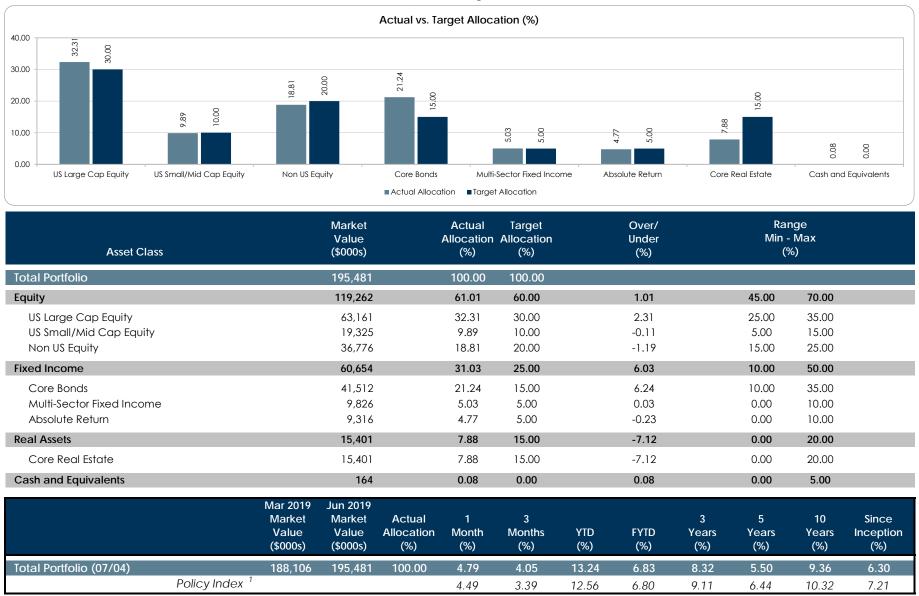
Total OPEB Liability (TOL) - The portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Benefits minus the actuarial present value of future Normal Costs.

Valuation Date or Actuarial Valuation Date - The date on which the value of plan assets, the Actuarial Present Value of Future Benefits, the Total OPEB Liability (TOL) and Normal Cost are determined. The expected future benefits are discounted to this date.



Post-Retirement Benefit Plan and Trust for Eligible Employees of LBWL

For the Periods Ending June 30, 2019



Post-Retirement Benefit Plan and Trust for Eligible Employees of LBWL

For the Periods Ending June 30, 2019

	Mar 2019 Market Value (\$000s)	Jun 2019 Market Value (\$000s)	Actual Allocation (%)	1 Month (%)	3 Months (%)	YTD (%)	FYTD (%)	3 Years (%)	5 Years (%)	10 Years (%)	Since Inception (%)
Total Portfolio (07/04)	188,106	195,481	100.00	4.79	4.05	13.24	6.83	8.32	5.50	9.36	6.30
Policy Index ¹				4.49	3.39	12.56	6.80	9.11	6.44	10.32	7.21
US Large Cap Equity (01/17) Russell 1000	60,569	63,161	32.31	7.45 7.02	4.62 4.25	19.45 18.84	12.28 10.02	 14.15	 10.45	 14.77	15.85 13.65
US Small/Mid Cap Equity (01/17) Blended Benchmark ²	18,364	19,325	9.89	7.78 7.09	5.24 2.96	18.82 19.25	-2.01 1.82				3.50 6.02
Non US Equity (01/17) * MSCI EAFE	35,100	36,776	18.81	5.97 5.97	4.78 3.97	16.07 14.49	1.64 1.60	 9.65	 2.74	 7.40	8.33 9.20
Fixed Income (01/17) BloomBar US Aggregate	58,836	60,654	31.03	1.40 1.26	3.17 3.08	6.55 6.11	7.78 7.87	 2.31	 2.95	 3.90	4.17 3.84
Real Assets (01/19) * NFI ODCE Net	15,216	15,401	7.88	1.22 0.78	1.22 0.78	2.67 1.99	 5.48	 6.61	 8.76	 8.87	2.67 1.99
Cash and Equivalents (01/17) US T-Bills 90 Day	22	164	0.08	0.19 0.21	0.58 0.64	1.16 1.24	2.16 2.31	 1.38	 0.87	 0.49	1.48 1.59

Post-Retirement Benefit Plan and Trust for Eligible Employees of LBWL

For the Periods Ending June 30, 2019

	Mar 2019 Market Value (\$000s)	Jun 2019 Market Value (\$000s)	Actual Allocation (%)	1 Month (%)	3 Months (%)	YTD (%)	FYTD (%)	3 Years (%)	5 Years (%)	10 Years (%)	Since Inception (%)
Equity (01/17)	114,033	119,262	61.01	7.06	4.84	18.44	6.62				11.71
US Large Cap Equity Loomis Sayles (01/13) Russell 1000 Growth	32,279	33,786	17.28	7.68 6.87	5.29 4.64	22.36 21.49	15.73 11.56	18.91 18.07	15.16 13.39	 16.28	16.42 16.24
Vanguard Russell 1000 Value (05/17) * Russell 1000 Value	28,291	29,375	15.03	7.18 7.18	3.83 3.84	16.21 16.24	8.44 8.46	 10.19	 7.46	 13.19	7.71 7.76
US Small/Mid Cap Equity Aristotle (08/18) Russell 2500	18,364	19,325	9.89	7.78 7.09	5.24 2.96	18.82 19.25	 1.77	 12.34	 7.66	 14.44	-4.05 -0.16
Non US Equity Harding Loevner Int'l Equity (09/17) * MSCI ACWI ex US	17,706	18,495	9.46	6.28 6.07	4.45 3.22	16.57 13.99	0.69 1.80	 9.91	 2.65	 7.03	4.18 2.82
Lazard Int'l Equity (09/17) * MSCI EAFE	17,393	18,281	9.35	5.66 5.97	5.10 3.97	15.56 14.49	2.61 1.60	 9.65	 2.74	 7.40	3.38 3.26
Fixed Income (01/17)	58,836	60,654	31.03	1.40	3.17	6.55	7.78				4.17
Core Bonds JP Morgan Fixed Income (01/09) BloomBar US Aggregate	40,259	41,512	21.24	1.21 1.26	3.20 3.08	6.26 6.11	7.88 7.87	2.46 2.31	3.34 2.95	4.30 3.90	4.35 3.89
Multi-Sector Fixed Income Fidelity Tactical Bond (09/18) * BloomBar US Aggregate	9,498	9,826	5.03	1.85 1.26	3.36 3.08	8.67 6.11	 7.87	 2.31	 2.95	 3.90	7.83 7.15
Absolute Return BlackRock Strategic Income Opp (09/17) * BloomBar US Aggregate US T-Bills 90 Day + 3.0%	9,079	9,316	4.77	1.65 1.26 0.46	2.61 3.08 1.38	5.17 6.11 2.74	5.13 7.87 5.37	 2.31 4.42	 2.95 3.89	3.90 3.50	3.33 3.25 4.95
Real Assets (01/19) *	15,216	15,401	7.88	1.22	1.22	2.67					2.67
Core Real Estate AEW Core Property Trust (01/19) * NFI ODCE Net	15,216	15,401	7.88	1.22 0.78	1.22 0.78	2.67 1.99	 5.48	6.61	 8.76	 8.87	2.67 1.99
Cash & Equivalents (01/17) Cash & Equivalents (01/17) US T-Bills 90 Day	22 22	164 164	0.08 0.08	0.19 0.19 0.21	0.58 0.58 0.64	1.16 1.16 1.24	2.16 2.16 2.31	 1.38	 0.87	 0.49	1.48 1.48 1.59

All returns prior to 12/31/2016 were calculated by the prior consultant.

* Net of Fee return data.

Policy Index: Effective January 2019, the index consists of 30.0% Russell 1000, 10.0% Russell 2500, 20.0% MSCI ACWI ex US, 32.0% BloomBar US Aggregate, 8.0% NFI ODCE Net.

² Blended Benchmark: Effective August 2018, the index consists of 100% Russell 2500.

The Fiscal Year End is June.

Market Overview

For the Periods Ending June 30, 2019

	1 Month	3 Months	YTD	FYTD	3 Years	5 Years	10 Years
	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Equity Markets - Core							
S&P 500	7.05	4.30	18.54	10.42	14.19	10.71	14.70
Russell 1000	7.02	4.25	18.84	10.02	14.15	10.45	14.77
Russell 2000	7.07	2.10	16.98	-3.31	12.30	7.06	13.45
Russell 2500	7.09	2.96	19.25	1.77	12.34	7.66	14.44
Equity Markets - Growth							
S&P 500 Growth	6.17	4.56	20.19	12.02	17.26	13.09	16.10
Russell 1000 Growth	6.87	4.64	21.49	11.56	18.07	13.39	16.28
Russell 2000 Growth	7.70	2.75	20.36	-0.49	14.69	8.63	14.41
Russell 2500 Growth	7.78	4.14	23.92	6.13	16.14	9.98	15.67
Equity Markets - Value							
S&P 500 Value	8.08	4.02	16.70	8.67	10.64	7.92	13.10
Russell 1000 Value	7.18	3.84	16.24	8.46	10.19	7.46	13.19
Russell 2000 Value	6.37	1.38	13.47	-6.24	9.81	5.39	12.40
Russell 2500 Value	6.47	1.89	15.26	-1.92	8.98	5.55	13.28
International Markets							
MSCI ACWI	6.59	3.80	16.60	6.32	12.22	6.74	10.73
MSCI ACWI ex US	6.07	3.22	13.99	1.80	9.91	2.65	7.03
MSCI EAFE	5.97	3.97	14.49	1.60	9.65	2.74	7.40
MSCI EAFE Growth	6.52	5.96	18.87	4.67	10.12	4.79	8.63
MSCI EAFE Value	5.38	1.89	10.12	-1.48	9.11	0.63	6.10
MSCI Emerging Markets	6.32	0.74	10.76	1.61	11.07	2.87	6.17
MSCI World	6.63	4.20	17.38	6.94	12.39	7.20	11.33
MSCI World ex US	5.98	4.07	15.11	1.84	9.58	2.55	7.27
Fixed Income							
ICE BofA ML 1 Yr Treasury Note	0.39	0.93	1.75	2.97	1.43	1.02	0.76
ICE BofA ML High Yield Master II	2.42	2.55	10.12	7.56	7.53	4.69	9.22
BloomBar US Aggregate	1.26	3.08	6.11	7.87	2.31	2.95	3.90
BloomBar Intermediate G/C	1.07	2.59	4.97	6.93	1.99	2.39	3.24
BloomBar 10 Yr Municipal	0.37	2.15	5.36	7.63	2.63	3.81	4.95
BloomBar US Credit	2.26	4.27	9.35	10.34	3.74	3.92	5.77
Real Assets	0.70	0.70	1.00	5.40	1	0.7/	0.07
NFI ODCE Net	0.78	0.78	1.99	5.48	6.61	8.76	8.87

Total Portfolio

Dollar Reconciliation (\$000s)

For the Periods Ending June 30, 2019

	3 Months	FYTD	
Beginning Market Value	188,106	184,006	
Net Additions	-229	-1,009	
Return on Investment	7,604	12,484	
Ending Market Value	195,481	195,481	

Disclosures and Legal Notice

This report was prepared by ACG using information from sources that may include the following: client's custodian(s); client's investment manager(s); ACG Investment Manager Database and Client Reporting Tool; third party data vendors; and other outside sources as may be directed by the client. Index Characteristics utilized in this report are obtained from third party data providers and may be different than index characteristics reported by investment managers/funds due to varied calculation methodologies and data sources. Although the information presented herein has been obtained from and is based upon sources ACG believes to be reliable, no representation or warranty, express or implied, is made as to the accuracy or completeness of that information. Accordingly, ACG does not itself endorse or guarantee, and does not itself assume liability whatsoever for, the accuracy or reliability of any third party data or the financial information contained herein.

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The Protecting Local Government Retirement and Benefits Act (PA 202 of 2017) Health Care (OPEB) Report

Enter Local Unit Name	LANSING CITY BOARD OF WATER & LIGHT	Instructions: For a list of detailed instructions on how to
Enter Six-Digit Municode	337537	complete and submit this form, visit
Unit Type	Authority	michigan.gov/LocalRetirementReporting.
Fiscal Year End Month	June	
Fiscal Year (four-digit year only, e.g. 2019)	2019	
Contact Name (Chief Administrative Officer)	Scott Taylor	Questions: For questions, please email
Title if not CAO	Manager, Finance	LocalRetirementReporting@michigan.gov. Return this
CAO (or designee) Email Address	SCOTT.TAYLOR@LBWL.COM	original Excel file. Do not submit a scanned image or PDF.
Contact Telephone Number	517-702-6104	
OPEB System Name (not division) 1	Post-Retirement Benefit Plan for Eligible Employees	If your OPEB system is separated by divisions, you would
OPEB System Name (not division) 2		only enter one system. For example, one could have
OPEB System Name (not division) 3		different divisions of the same system for union and non-
OPEB System Name (not division) 4		union employees. However, these would be only one system
OPEB System Name (not division) 5		and should be reported as such on this form.

Line	Descriptive Information	Source of Data	System 1	System 2	System 3	System 4	System 5
1	Is this unit a primary unit (County, Township, City, Village)?	Calculated	NO	NO	NO	NO	NO
	Provide the name of your retirement health care system		Post-Retirement	-			
2	Provide the name of your retirement health care system	Calculated from above	Benefit Plan for				
3	Financial Information						
4	Enter retirement health care system's assets (system fiduciary net position ending)	Most Recent Audit Report	195,158,575				
5	Enter retirement health care system's liabilities (total OPEB liability)	Most Recent Audit Report	148,549,677				
6	Funded ratio	Calculated	131.4%				
7	Actuarially determined contribution (ADC)	Most Recent Audit Report	7,030,548				
7a	Do the financial statements include an ADC calculated in compliance with Numbered Letter 2018-3?	Most Recent Audit Report	YES				
8	Governmental Fund Revenues	Most Recent Audit Report	356,884,521				
9	All systems combined ADC/Governmental fund revenues	Calculated	2.0%				
10	Membership						
11	Indicate number of active members	Most Recent Actuarial Funding Valuation	690				
12	Indicate number of inactive members	Most Recent Actuarial Funding Valuation	-				
13	Indicate number of retirees and beneficiaries	Most Recent Actuarial Funding Valuation	745				
14	Provide the amount of premiums paid on behalf of the retirants	Most Recent Audit Report or Accounting Records	9,277,538				
15	Investment Performance						
16	Enter actual rate of return - prior 1-year period	Most Recent Actuarial Funding Valuation or System					
10		Investment Provider	6.36%				
17	Enter actual rate of return - prior 5-year period	Most Recent Actuarial Funding Valuation or System					
1/		Investment Provider	26.96%				
18	Enter actual rate of return - prior 10-year period	Most Recent Actuarial Funding Valuation or System					
		Investment Provider	127.70%				
19	Actuarial Assumptions						
20	Assumed Rate of Investment Return	Most Recent Actuarial Funding Valuation	7.50%				
21	Enter discount rate	Most Recent Actuarial Funding Valuation	7.50%				
22	Amortization method utilized for funding the system's unfunded actuarial accrued liability, if any	Most Recent Actuarial Funding Valuation					
23	Amortization period utilized for funding the system's unfunded actuarial accrued liability, if any	Most Recent Actuarial Funding Valuation					
24	Is each division within the system closed to new employees?	Most Recent Actuarial Funding Valuation	No				
25	Health care inflation assumption for the next year	Most Recent Actuarial Funding Valuation	8.25%				
26	Health care inflation assumption - Long-Term Trend Rate	Most Recent Actuarial Funding Valuation	4.50%				
27	Uniform Assumptions		1				ļ
28	Enter retirement health care system's actuarial value of assets using uniform assumptions	Most Recent Actuarial Funding Valuation	195,158,575				
29	Enter retirement health care system's actuarial accrued liabilities using uniform assumptions	Most Recent Actuarial Funding Valuation	153,192,588				
30	Funded ratio using uniform assumptions	Calculated	127.4%				
31	Actuarially Determined Contribution (ADC) using uniform assumptions	Most Recent Actuarial Funding Valuation	7,494,080				
	All systems combined ADC/Governmental fund revenues	Calculated	2.1%				
	Summary Report						
34	Did the local government pay the retiree insurance premiums for the year?	Accounting Records	YES				
35	Did the local government pay the normal cost for employees hired after June 30, 2018?	Accounting Records	YES				
		Primary unit triggers: Less than 40% funded AND greater					
36	Does this system trigger "underfunded status" as defined by PA 202 of 2017?	than 12% ARC/Governmental fund revenues. Non-Primary					
		unit triggers: Less than 40% funded	NO	NO	NO	NO	NO

Requirements (For your information, the following are requirements of P.A. 202 of 2017)
Local units must post the current year report on their website or in a public place

The local unit of government must electronically submit the form to its governing body.

Local units must have had an actuarial experience study conducted by the plan actuary for each retirement

system at least every 5 years

Local units must have had a peer actuarial audit conducted by an actuary that is not the plan actuary OR replace the plan actuary at least every 8 years.

By emailing this report to the Michigan Department of Treasury, the local unit of government acknowledges that this report is complete and accurate in all known respects.

FD A 202 of 2017

POST-RETIREMENT BENEFIT PLAN FOR ELIGIBLE EMPLOYEES OF LANSING BOARD OF WATER & LIGHT

STATEMENT OF INVESTMENT POLICIES, PROCEDURES AND OBJECTIVES

Effective May 22, 2018, except as otherwise noted herein

STATEMENT OF INVESTMENT POLICIES, PROCEDURES AND OBJECTIVES

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Introduction

The Lansing Board of Water and Light ("**BWL**") is a municipally owned utility providing drinking water, electricity, steam and chilled water services to the greater Lansing area in mid-Michigan. The Plan receives contributions from the Lansing Board of Water and Light. The Plan pays retirement benefits provided for in the Plan. Plan assets are invested in various types of securities.

This Statement of Investment Policy ("**Statement**") is issued by the Commissioners of the Lansing Board of Water & Light (the "**Commissioners**") for the Post-Retirement Benefit Plan for Eligible Employees of Lansing Board of Water and Light ("**Plan**"). The purpose of this Statement is to identify and present a set of investment objectives, an asset allocation policy, investment performance standards and procedures for managing the Plan's assets.

Updates to Statement

The Commissioners retain the authority to approve, revise and update this Statement as necessary to ensure that it is consistent with the BWL's investment philosophy. Any revisions or updates made to the Statement shall be communicated to the Trustees from time to time in writing. The Trustees shall formally acknowledge any revisions or updates by communicating the same to the Commissioners in writing. It shall be the duty of the Trustees to act strictly in accordance with the Statement, and any changes therein, as so communicated to and acknowledged by the Trustees.

<u>Trustees</u>

The Trustees of the Plan are the eight appointed voting Commissioners of the Lansing Board of Water & Light. The Trustees have delegated certain responsibilities that are described in this Statement to the Retirement Plan Committee, effective as of the date on which this Statement is acknowledged by the Trustees by signature of an authorized representative of the Trustees. As of that date, all provisions in this Statement relating to the Retirement Plan Committee shall become operative.

Responsibility for selecting and providing direction to Investment Managers, Investment Consultants, custodians, and other administrators required for the management of the Plan's assets and for evaluating overall investment results has been delegated to the Retirement Plan Committee which shall report to the Trustees regarding selections made and investment performance. The Trustees, in evaluating the Retirement Plan Committee's actions, shall act in accordance with the terms of this Statement, as updated from time to time by the Commissioners, and as communicated to the Trustees in writing.

Purpose of the Plan

The Plan was established for the purpose of providing post-retirement medical benefits to eligible employees and their beneficiaries. The Plan is a governmental retiree medical

plan which provides medical, prescription drug, dental and life insurance benefits upon a participant's attainment of normal, early or disability retirement status. An investment portfolio is maintained to invest employer contributions and to reinvest income.

Investment Philosophy

The Commissioners, Trustees and the Retirement Plan Committee recognize their respective fiduciary duties to invest the Plan's assets in formal compliance with the Prudent Man Rule. The Trustees interpret this to mean that, in addition to the specific guidelines and restrictions set forth in this document, the assets of the Plan shall be actively managed -- that is, investment decisions regarding the particular securities to be purchased or sold shall be the result of the conscious exercise of discretion. Further, the Trustees recognize that, commensurate with its overall objective of maximizing long-range returns while maintaining a high standard of portfolio quality and consistency of return, it is necessary that proper diversification of assets be maintained both among and within the classes of securities held. Within this context of active management and the necessity for adherence to proper diversification, the Trustees and the Retirement Plan Committee rely upon appropriate professional advice.

Delegation of Responsibilities

Retirement Plan Committee

The Retirement Plan Committee acknowledges its responsibility as a fiduciary to the Plan. In this regard, the Retirement Plan Committee must act prudently and for the exclusive interest of the Plan's participants and beneficiaries.

More specifically, the Retirement Plan Committee's responsibilities include:

- 1. Complying with the provisions of pertinent federal, state, and local laws and regulations relating to the investment of Plan assets.
- 2. Evaluating and appointing a qualified manager(s) and consultant(s) to invest and manage the Plan's assets.
- 3. Communicating the investment goals, objectives, and standards to the investment managers including any material changes that may subsequently occur.
- 4. Determining, with the advice of the Investment Consultant ("Consultant"), how Plan assets should be allocated among various asset classes.
- 5. Review and evaluate the results of the Investment Manager(s) ("Manager(s)") in context with established standards of performance.
- 6. Taking whatever corrective action is deemed prudent and appropriate when an investment manager fails to perform as mutually expected.
- The Retirement Plan Committee will notify the Manager(s) of:
 a) Significant changes in the Plan cash flow and/or cash flow needs; and
 b) Any matter which bear upon the proper investment management of the Plan's assets, including pertinent financial, legal, and actuarial information.
- 9. Monitor all costs associated with the administration of the Plan's investment to ensure that they are reasonable with market averages.
- 10. Review any program that may mitigate or offset costs.

The Retirement Plan Committee shall give consideration to and have an understanding of the following prior to retaining professionals:

- 1. Establishing standards/requirements/appropriateness of services.
- 2. Identification of appropriate candidates for the position.
- 3. Solicitation of bids and proposals.
- 4. Conduct interviews.
- 5. Check references.
- 6. Make reasoned decisions based on all information, including:
 - a) Philosophy/Goals (i.e., Mission Statement)
 - b) Ownership/Management/Organizational Structure/Turnover
 - c) Operational History/Growth Plan
 - d) Infrastructure: Resources/Tools-of-the-Trade
 - e) Financial Condition
 - f) Educational Background/Industry Experience
 - g) Professional Qualifications
 - h) Risk Controls/ Insurance
 - I) Criminal, Civil, Regulatory History
 - j) Fees
 - k) Liquidity
- 7. Document the decision process.
- 8. Verify compliance with federal and state laws and Investment Guidelines.
- 9. Establish standards of conduct, terms and conditions of relationship (Written Contract/Agreement).

Investment Consultant

In carrying out its delegated responsibilities, the Retirement Plan Committee considers the services of a Consultant as appropriate to assist in the placement of investment funds. The primary role of the Consultant is to provide independent, objective, thirdparty advice and counsel that will enable the Retirement Plan Committee to make wellinformed and timely decisions regarding the investment of the Plan's assets.

The Consultant's role is that of an advisor to the Plan. The Consultant acknowledges its responsibilities as a fiduciary. The Consultant acknowledges that it is a registered investment advisor under either the Investment Advisors Act of 1940 or the Michigan Uniform Securities Act.

Investment advice concerning the investment management of Plan assets will be offered by the Consultant, and will be consistent with the investment objectives, policies, guidelines and constraints as established in this statement. In specific terms, the primary responsibilities of the Consultant are as follows:

- 1. Measure and evaluate investment performance each calendar quarter.
- 2. Evaluate the Plan's tolerance for risk.
- 3. Advise regarding appropriate investment objectives and goals based on the Plan's needs and risk tolerance.

- 4. Determine what degree of potential market volatility should be factored into the investment approach.
- 5. Based on all of the above, advise regarding optimal allocation of assets.

Providing a Range of Capabilities

The Consultant is a third party retained by the Retirement Plan Committee to assist in several key areas of the management of financial assets.

The Consultant may be asked to:

- 1. Gather and evaluate statistical information on the financial assets, investment needs, and risk parameters.
- 2. Analyze and understand the implications of historic capital market behavior, particularly with regard to the trade-off between total rate of return and investment risk.
- 3. Maintain data on the universe of available professional investment managers, and categorize (as to investment style and discipline) and evaluate the qualifications of the individual management firms.
- 4. Provide periodic asset allocation studies and updates.
- 5. Conduct periodic trustee educational workshops.
- 6. Provide information with respect to alternate investments.
- 7. Monitor the investment of the Plan's assets for compliance with relevant laws and regulations.
- 8. Analyze and evaluate the Plan's investment performance, and the performance of its investment managers, both past and ongoing.
- 9. Make specific and timely recommendations for the consideration of the Management during each phase of the investment management process.
- 10. Monitor all costs associated with the administration of the Plan's investment to ensure that they are reasonable with market averages.

Making Recommendations

Investment Policy - The Consultant may be asked to recommend an appropriate investment policy that will meet the Plan's needs. This includes recommending investment objectives and guidelines that adhere to the goals and tolerance for risk. The Consultant may be asked to provide an appropriate model of asset allocation composed of equity, fixed-income, money market instruments or alternative investments designed to meet the established objectives.

Manager Selection - The Consultant may be asked to recommend the best qualified and most appropriate Manager(s) candidates for implementing the established investment policy. The Consultant shall be capable of utilizing a well-established system to select suitable Manager(s) candidates from both a local and national investment manager database.

Manager Performance Review and Evaluation

The Consultant shall provide the Retirement Plan Committee with performance reports and ongoing quality control to assure that the standards and investment objectives are maintained. Performance reports generated by the Consultant shall be compiled at least quarterly and communicated to the Retirement Plan Committee for review. The investment performance of total portfolios, as well as asset class components, will be measured against commonly accepted performance benchmarks. Consideration shall be given to the extent to which the investment results are consistent with the investment objectives, goals, and guidelines as set forth in this statement. The Retirement Plan Committee intends to evaluate the portfolio(s) over at least a three year period, but reserves the right to terminate a Manager(s) for any reason including the following:

- Investment performance which is significantly less than anticipated given the discipline employed and the risk parameters established, or unacceptable justification of poor results.
- 2. Failure to adhere to any aspect of this Statement of Investment Policy, including communication and reporting requirements.
- 3. Significant qualitative changes to a Manager(s) organization.

Manager(s) shall be reviewed regularly regarding performance, personnel, strategy, research capabilities, organizational and business matters, and other qualitative factors that may impact their ability to achieve the desired investment results.

Investment Manager(s)

Each Manager acknowledges its responsibility as an investment fiduciary. Each Manager acknowledges that it is a registered investment advisor under either the Investment Advisors Act of 1940 or the Michigan Uniform Securities Act. Each Manager will have full discretion to make all investment decisions for the assets placed under its control, while observing and operating within all policies, guidelines, constraints, and philosophies as outlined in this statement.

Adherence to Policy Guidelines and Objectives

The assets of the Plan are to be managed in accordance with the policy guidelines and objectives expressed herein as well as any additional guidelines provided separately. Assets shall be invested in strict compliance with relevant laws and regulations. Each Manager shall manage its individual portfolio in compliance with relevant laws and regulations.

Discretionary Authority

Each Manager is expected to exercise complete investment discretion. Such discretion includes decisions to buy, hold and sell equities or fixed income securities (including cash equivalents) in amounts and proportions reflective of the Manager's current investment strategy and compatible with the investment guidelines.

Each Manager is expected, within the limitation of the account size, to diversify the portfolio to minimize the risk of large losses unless, under the circumstances, it is clearly prudent not to so diversify. The investment manager shall invest the assets of the Plan with the same care, skill, prudence and diligence under the circumstances then prevailing that a prudent man, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with such aims. The

investment manager will provide the Retirement Plan Committee with suggested strategy which might be changed or adopted to better suit the investment guidelines adopted by the Retirement Plan Committee.

Communications

Each Manager is responsible for communicating with the Retirement Plan Committee regarding all significant matters pertaining to the investment of the Plan's assets. The Retirement Plan Committee shall be kept apprised of substantive changes in investment strategy, asset mix, portfolio structure, and market value of the Plan's assets. If requested, Manager(s) will meet with the Retirement Plan Committee on a quarterly basis to review the portfolio and the investment outlook.

Reporting

Each Manager is expected to provide:

- 1. INITIALLY, a written statement (per management agreement) acknowledging their acceptance of the guidelines and performance standards herein stated.
- 2. AT LEAST QUARTERLY, a portfolio composition report to the Retirement Plan Committee of the funds under their management. The report shall contain as a minimum the following data:
 - a. Investment Review
 - i. Account characteristics;
 - ii. Investment summary to include asset description, cost, date, unit value, market value, percent of market, current yield, unrealized gains/losses, and estimated annual income;
 - iii. Maturity schedule to include year due and percent of total; and
 - b. Summary and statement of assets under management.
- 3. ANNUALLY, and thereafter at the request of the Retirement Plan Committee, participation in a review meeting, the agenda to include, but not restricted to
 - a. A review and re-appraisal of the herein contained Statement;
 - b. A brief review of the recent capital market environment to include discussion of any event particularly pertinent to the management of this portfolio;
 - c. A commentary on investment results in light of the appropriate standards of performance as stated herein;
 - d. A synopsis of key investment decisions made by the Manager, the underlying rationale, and how those decisions could impact future results;
 - e. Recommendations as to changes in goals or standards, based upon material and sustained changes in the capital markets;
- 4. UPON WRITTEN OR ORAL REQUEST
 - a. Copies of all documentation in support of any investment activity;
 - b. A summary of receipts and disbursements;
 - c. A listing of assets acquired and disposed of;
 - d. Evidence of suitable insurance coverage of the Manager's fiduciary responsibilities.
- 5. IMMEDIATE NOTIFICATION a. Notice of material changes in the Manager's outlook, policy, and tactics

b. Notice of material changes in ownership, organizational structure, financial condition, senior staffing and management of the Manager's organization.

Each manager's investment guidelines and performance objectives are made a part of their investment management agreement. Compliance with these guidelines and objectives is evaluated during the quarterly investment performance evaluation process.

<u>Custodian</u>

The primary responsibilities of the custodian ("Custodian") are to:

- 1. Provide adequate safekeeping services.
- 2. Settle securities transactions on time.
- 3. Collect trust fund income when due.
- 4. Provide adequate accounting services.
- 5. Prepare useful, accurate, and timely investment reports.
- 6. Provide adequate cash-management services.
- 7. Provide adequate administrative support.
- 8. Develop and maintain adequate data processing capabilities.
- 9. Handle proxy administration promptly and accurately.
- 10. Complete and file timely proof of claims for settlements of security class action suits and monitor the processing to ensure claims are received.

Plan Investment Policy

The Plan is maintained to provide retiree medical benefits for the participants and their beneficiaries.

The Trustees (or their delegate) are authorized and permitted by the Plan Document and under Michigan law to engage the services of a Manager(s), Consultant and Custodian and to set the direction for the investments.

The Trustees require that the Manager(s), Consultant and Custodian comply with all applicable laws, rules and regulations. Manager(s) will be given full discretion in managing the funds within this Statement.

Plan Investment Objectives

The Trustees' attitudes regarding Plan assets combine both preservation of capital and moderate risk-taking. The Trustees recognize that risk (i.e., the uncertainty of future events), volatility (i.e., the potential for variability of asset values), and the potential of loss in purchasing power (due to inflation) are present to some degree with <u>all</u> types of investment vehicles. While high levels of risk are to be avoided, the assumption of a moderate level of risk is warranted and encouraged in order to allow the opportunity to achieve satisfactory results consistent with the objectives and character of the Plan. The policies and restrictions contained in this Statement should not impede the Manager to attain the overall Plan objectives, nor should they exclude the Manager from appropriate investment opportunities.

The Plan's overall investment objective is to earn an average, annual return of 7.5% over five-year rolling periods. Achievement of this objective is likely to result in stable to declining future contribution rates and ensure its ability to pay retirement benefits for all plan participants.

The Plan's objective is based on the expected returns under the strategic asset allocation policy, which follows. This asset allocation policy should result in normal fluctuation in the Plan's actual return, year to year. The expected level of risk (volatility, or return fluctuation) is appropriate given the Plan's current and expected tolerance for short-term return fluctuations. Appropriate diversification of Plan assets will reduce the Plan's investment return volatility.

Asset Allocation Policy

This strategic asset allocation policy is consistent with the achievement of the Plan's financial needs and overall investment objectives. Asset classes are selected based on the expected long-term returns, individual reward/risk characteristics, and correlation with other asset classes, manager roles, and fulfillment of the Plan's long-term financial needs.

The Commissioners established an allocation range for each asset class in recognition of the need to vary exposure within and among different asset classes, based on investment opportunities and changing capital market conditions. The Commissioners selected the target allocation for each asset class based on the Plan's current financial condition, expected future contributions, withdrawals, plan expenses and current investment opportunities, notwithstanding short-term performance. The Commissioners intend to review these allocation targets at least annually, focusing on changes in the Plan's financial needs, investment objectives, and asset class performance. Post-Retirement Benefit Plan for Eligible Employees of Lansing Board of Water & Light

Target Asset Allocation

Asset Class	<u>Manager Role</u>	Allocation Range	<u>Target</u> <u>Allocation</u>
Total Equity	Active/Passive	45 to 70%	60%
US Large Cap Equity	Active/Passive	25 to 35%	30%
US SMID Cap Equity	Active	5 to 15%	10%
Non-U.S. Equities	Active, Broad or Focused	15 to 25%	20%
Total Fixed Income	Active/Passive, Core, Opportunistic	10 to 50%	25%
Core Fixed Income	Active/Passive Core, Intermediate Diversified	10 to 35%	15%
Multi-Sector Fixed Income	Active Fixed Income	0 to 10%	5%
Liquid Absolute Return Fixed Income	Active Fixed Income	0 to 10%	5%
Commercial Real Estate	Core, value-added, opportunistic, public or private	0 to 20%	15%
Cash Equivalents	Active, money market fund	0 to 5%	0%
	Total Fund		100.0%

The Trustees recognize that the transition to the above target allocations will be achieved over an appropriate period of time, based upon manager availability, selection and approval as well as portfolio needs and constraints.

The Trustees acknowledge that alternative asset classes are available and intend to periodically evaluate the merits of using different asset classes. The Trustees also recognize the benefits of diversifying manager roles within a given asset class and intend to periodically evaluate this decision as well as the active versus passive management decision.

In order to preserve capital gains and protect principal during periods of market duress, a short-term U.S. government and/or high-quality credit securities fund may be used. Given the infrequent short-term use and specialized purpose of this fund, it is not included in either the Policy Index or Target Asset Allocation.

Administrative and Investment Review Procedures

Review of Policies

All investment policies and investment management guidelines will be reviewed annually by the Trustees, or whenever circumstances change to the extent that the policies may be ineffective or inappropriate.

General Review

Annually, all those responsible for investment of the Plan's assets shall submit a report or meet with the Retirement Plan Committee to review their activities for the current year and discuss proposed changes that are anticipated.

Review of Investment Performance

The Retirement Plan Committee will monitor the investment performance of each manager and the overall deployment of the Plan's assets. Monitoring will include periodic meetings with the Manager(s), and a quarterly performance evaluation performed by the Consultant.

Each performance evaluation will include:

- 1. The present and prospective economic climate;
- 2. Current period and historical, time-weighted rates of return for the overall Plan, including an evaluation against the previously specified performance standards;
- 3. Current period and historical, time-weighted rates of return for each Manager, including an evaluation against the previously specified performance standards;
- 4. Additional quantitative measures and analysis will be employed to objectively monitor each Manager's compliance with investment policies and guidelines.
- 5. An understanding of the strategy being used by each Manager to carry out the current Investment Policy; and
- 6. Opportunities available within current and prospective asset categories.

The Retirement Plan Committee requests that all documents, exhibits, written materials, etc. to be used during the meetings be submitted in advance.

Individual Investment Manager Objectives

On a quarterly basis, the performance of each of the investment managers will be compared to a relevant benchmark index and to a relevant universe of investment management firms. The ongoing review and evaluation of investment manager results will be the responsibility of the Retirement Plan Committee, with the assistance of the Consultant. The primary emphasis of the review of each investment manager will be placed on relative rates of return and risk as compared against relevant benchmarks, peers and expectations for each specific manager.

Over a market cycle (usually 3-5 years), the following are the performance expectations for each portfolio:

- The total return of each portfolio should exceed the total return of the relevant index.
- The total return of each portfolio should rank median or higher when compared to the relevant peer group.

In addition to relative rates of return each portfolio's performance will be evaluated based on its relative risk profile as measured by its standard deviation and other benchmark relative statistics; risk adjusted returns as measured by the portfolio's Sharpe ratio and performance in up and down markets.

Passive portfolio allocations are expected to approximate the risk and return profile of the appropriate benchmark.

Rebalancing Policy – Overall Fund Allocation

The system of asset allocation rebalancing to be utilized involves a target asset mix around which variance is allowed within prescribed limits. Rebalancing will be addressed when a limit is reached or exceeded. In addition to monitoring target and actual allocations quarterly, the Retirement Plan Committee will formally review the policy and actual allocations in light of anticipated cash flow.

Review of Investment Management

Manager(s) are responsible for frequent and open communication (in writing) with Management and the Consultant on all significant matters pertaining to Investment Policy and the management of the Plan's assets, including, but not limited to:

- 1. A quarterly report of major changes in each Manager's investment outlook, investment strategy and portfolio structure.
- 2. Any significant changes in ownership, organizational structure, financial conditions, or senior personnel staffing of each Manager's organization.
- 3. Any investment guidelines which inhibit the fulfillment of a Manager's fiduciary duties, inappropriately restrict performance, or prevent the manager from meeting their performance standards.

Proxy Voting

The Trustees confer the right to vote proxies to the Manager(s), unless the Manager(s) are otherwise notified by the Retirement Plan Committee in writing. It is expected that Manager(s) will vote for the sole benefit of the Plan participants and beneficiaries, considering those factors that may affect the value of the Plan's investments and not

subordinate the interests of the participants and beneficiaries in their retirement income to unrelated objectives.

A summary of votes cast shall be submitted to the Retirement Plan Committee on an annual basis. This summary must identify the company, number of shares held, subject proxy issues, actual vote (whether for or against the Retirement Plan Committee's recommendation), and justification.

Directed Brokerage

With regard to directed-brokerage, the Trustees do not require the Manager(s) to trade securities through an individual or set of broker-dealers. The Trustees wish to give the Manager(s) full discretion over their choice of broker-dealers, so long as the Plan's total cost or proceeds of transactions are the most favorable under the circumstances.

<u>Tenure</u>

While the relationship with Manager(s) is expected to be ongoing, the Retirement Plan Committee reserves the right to terminate their relationship with any retained Manager at any time they deem appropriate.

In General Managers are fiduciaries with discretion to implement the guidelines within the direction provided by this Statement.

Managers should present (and obtain approval on) material changes in their investment style, philosophy or process to the Retirement Plan Committee before implementing any changes on behalf of the Plan.

Managers (except commingled funds) are prohibited from using warrants, options, futures, collectibles, leverage, mutual funds (money market funds exempted), LLCs, ETFs, unit investment trusts, margin purchases or short sales, securities of Plan service providers (custodial bank notwithstanding), and loaning or pledging securities (certain index funds exempted). While commingled funds are exempt from the prohibited securities noted above, they are expected to be managed within the guidelines set forth for each fund. Commingled fund managers are required to comply with the appropriate performance standards and reporting requirements contained in this document.

If a Manager would like to purchase a security that falls outside of this Plan's investment guidelines (commingled funds exempted), or is in doubt as to the goal and intent of these guidelines, they should submit a written request for clarification to the Retirement Plan Committee prior to purchase. Any security not specifically defined or permitted within is prohibited for investment on behalf of this Plan.

Cash Equivalents The cash equivalents Manager may invest in any institutional money market fund ("Fund") that follows the following objectives and policies:

- 1. The Fund seeks to provide current income while maintaining liquidity and a stable share price of \$1.
- 2. The Fund invests primarily in high-quality, short-term money market instruments, including certificates of deposit, Bankers Acceptances, commercial paper (except ABS commercial paper), and other money market securities.
- 3. To be considered high-quality, a security generally must be rated in one of the two highest credit-quality categories for short-term securities by at least two nationally recognized rating services (or by one, if only one rating service has rated the security).
- 4. If unrated, the security rating must be determined by the manager, subject to the limitations in item 3.
- 5. The Fund maintains a dollar-weighted average maturity of 90 days or less.

Total Plan Performance

The primary investment objective is to meet the long-term financial goals of the Lansing Board of Water and Light Plan. The Plan's asset allocation will be used as the primary tool to achieve this goal.

The Plan is expected to meet or exceed the following objectives over a full market cycle (usually three to five years):

- 1) Earn a rate of return after all expenses that equals or exceeds the current actuarial assumed rate of return of 7.5%
- 2) The Plan's total return should exceed the total return of the Policy index comprised of the following:

Index	Percent
Russell 1000	30%
Russell 2500	10%
MSCI ACWI ex-US	20%
BloomBar US Aggregate	25%-40%*
NFI ODCE (net) Index	0-15%*

* An allocation to private real estate has been approved. The policy index will include an allocation to the NFI ODCE (net) Index after the funding of private real estate occurs. The policy index allocation to the BloomBar US Aggregate index will be reduced from 40% with the funding of private real estate.

- 3) The Plan's total return should rank at median or above when compared to a universe of other portfolios with a similar equity allocation.
- 4) In addition to relative rates of return the Plan's performance will be evaluated based on its relative risk profile as measured by its standard deviation, beta, correlation to

the Policy Index, risk adjusted returns as measured by the Plan's Sharpe ratio and performance in up and down markets.

Conclusion

It is in the intent of this Statement to state an attitude and/or philosophy which will guide Managers toward the performance desired. It is further intended that these objectives be sufficiently specific, but also sufficiently flexible.

It is the opinion of the Commissioners that these limitations and guidelines will not prevent a Manager from achieving the objectives set forth.

Glossary of Investment Terms

Alternative Investments - These investments are typically made through the purchase of limited partner units in a private limited partnership. Alternative investments include hedge funds, managed futures and commodities, private equity, real assets and other.

Asset Allocation - A process used to determine the optimal allocation of a fund's portfolio among broad asset classes.

Benchmark Index - An index against which the investment performance of a Manager can be compared for the purpose of determining the value added by the Manager. A benchmark portfolio must be of the same style as the Manager, and in particular, similar in terms of risk.

Best Execution - This is formally defined as the difference between the strike price (the price at which a security is actually bought or sold) and the fair market price which involves calculating opportunity costs by examining the security price immediately after the trade is placed. Best execution occurs when the trade involves no opportunity cost, for example when there is no increase in the price of a security shortly after it is sold.

Fiduciary - Indicates the relationship of trust and confidence where one person (the fiduciary) holds or controls property for the benefit of another person.

Funding Risk - The risk that anticipated contributions to the fund would not be made.

Liquidity - In general, liquidity refers to the ease by which a financial asset can be converted into cash. Liquidity is often more narrowly defined as the ability to sell an asset quickly without having to make a substantial price concession.

Nominal Return - The nominal return on an asset is the rate of return un-adjusted for any change in the price level. The nominal return is contrasted with the real return that is adjusted for changes in the price level.

Standard Deviation - A statistical measure of portfolio risk. It reflects the average deviation of the observations from their sample mean. Standard deviation is used as an estimate of risk since it measures how wide the range of returns typically are. The wider the range of returns, the higher the standard deviation of returns, and the higher the portfolio risk. If returns are normally distributed (i.e. has a bell shaped curve distribution) then approximately two-thirds of the returns would occur within plus or minus one standard deviation from the sample mean.

Strategic Asset Allocation – The strategic mix of assets designed to accomplish a long-term goal such as funding medical benefits. Generally, policy targets are set for the strategic asset classes with allowable ranges around those targets. The allowable ranges are established to allow flexibility in the management of the investment portfolio.

Systematic Risk - The part of a security's total risk that is related to movements in the market and therefore cannot be diversified away.

Tactical Asset Allocation – The tactical mix of assets is short-term in nature with a goal of maximizing returns. This strategy is used to take advantage of current market conditions that may be more favorable for one asset class over another.

Time-weighted Return - A method of measuring the performance of a portfolio over a particular period of time. It is the cumulative compounded rate of return of the portfolio, calculated on each date that cash flow moves into or out of the portfolio.

Universe - A group of Managers/Funds chosen to have an investment style similar to the Manager/Fund and used for comparison purposes.

Lansing Board of Water and Light Defined Contribution Plan and Trust 1

Financial Report With Required Supplementary Information As of and for the Years Ended June 30, 2019 and 2018

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INDEPENDENT AUDITORS' REPORT

To the Honorable Mayor, Members of the City Council, and Commissioners of the Board of Water and Light Lansing Board of Water and Light Defined Contribution Plan and Trust 1 City of Lansing, Michigan

We have audited the accompanying financial statements of the Lansing Board of Water and Light Defined Contribution Plan and Trust 1 ("Plan"), as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary position of the Plan as of June 30, 2019 and 2018, and the respective changes in fiduciary position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Baker Tilly Virchaw Krause, UP

Madison, Wisconsin September 5, 2019

Management's Discussion and Analysis As of and for the Years Ended June 30, 2019 and 2018

Using this Annual Report

This annual report consists of two parts: (1) Management's Discussion and Analysis (this section) and (2) the financial statements. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data.

Condensed Financial Information

The table below compares key financial information in a condensed format between the current year and the prior two years:

	 2019	2018			2017
Assets held in trust:					
Mutual funds	\$ 147,768,040	\$	145,098,563	\$	136,451,476
Stable value	36,352,914		35,135,911		35,270,975
Guaranteed income fund	8,940,026		8,638,662		8,491,010
Participant notes receivable and other	 7,210,032		5,794,428		5,726,432
Net position	\$ 200,271,012	\$	194,667,564	<u>\$</u>	185,939,893
Changes in plan assets:					
Net investment income/(loss)	\$ 11,044,252	\$	17,630,692	\$	19,491,557
Employer and participant contributions	8,405,369		8,183,397		7,103,752
Benefits paid to participants	(13,639,444)		(16,928,587)		(11,877,805)
Loan defaults and other changes	 (206,729)		(157,831)		(8,926)
Changes in net position	\$ 5,603,448	\$	8,727,671	\$	14,708,578

Investment Objectives

The principal purpose of the Lansing Board of Water and Light Defined Contribution Plan and Trust 1 ("Plan") is to provide benefits at a normal retirement age. The Plan's funds are selected to optimize return on a risk-adjusted basis within each asset class, to provide an opportunity to create a well-diversified portfolio, to control administrative and management cost, and to comply with relevant Michigan and federal law.

Management's Discussion and Analysis As of and for the Years Ended June 30, 2019 and 2018

Investment Objectives (Continued)

The Plan allows each participant to direct the investment of the funds in his or her Plan accounts. The Lansing Board of Water and Light ("BWL") will offer various investment options (consistent with the investment policy statement), among which participants may choose to invest their respective interests in the Plan. The BWL periodically reviews the performance of investment options available to participants to ensure that each such option is meeting its investment objectives.

Investment Results

The fiscal year ended June 30, 2019 saw a net investment gain of \$11.0 million. Total assets held in trust at the end of the fiscal year were \$200.3 million.

Future Events

The BWL has no current plans to revise the terms of its Plan.

Contacting the Plan's Management

This financial report is intended to provide a general overview of the Plan's finances and to show accountability for the money it receives. If you have questions about this report or need additional information, you may write the Lansing Board of Water and Light, Chief Financial Officer, P.O. Box 13007, Lansing, Michigan 48901–3007.

Lansing Board of Water and Light Defined Contribution Plan and Trust 1

	As of June 30					
		2018				
Assets						
Participant-directed investments (Note 1):						
Mutual funds	\$	147,768,040	\$	145,098,563		
Stable value		36,352,914		35,135,911		
Guaranteed income fund		8,940,026		8,638,662		
Self-directed brokerage account		3,787,956		2,144,556		
Total participant-directed investments		196,848,936		191,017,692		
Participant notes receivable		3,422,076		3,649,872		
Net Position Restricted for Pensions	\$	200,271,012	\$	194,667,564		

Statement of Fiduciary Net Position

Lansing Board of Water and Light Defined Contribution Plan and Trust 1

Statement of Changes in Fiduciary Net Position

	For the Year Ended June 30					
		2019		2018		
Additions						
Investment income:						
Net appreciation in fair						
value of investments	\$	1,406,649	\$	8,851,973		
Dividend income		9,637,603		8,778,719		
Total investment income		11,044,252		17,630,692		
Employer contributions (Note 1)		6,618,384		6,534,888		
Participant rollover contributions		1,786,985		1,648,509		
Interest from participant notes receivable		210,373		156,090		
Total additions		19,659,994		25,970,179		
Deductions						
Benefits paid to participants		13,639,444		16,928,587		
Loan defaults		247,237		209,514		
Participants' note and administrative fees		169,865		104,407		
Total deductions		14,056,546		17,242,508		
Net Increase in Net Position		5,603,448		8,727,671		
Net Position Restricted for Pensions						
Beginning of year		194,667,564		185,939,893		
End of year	\$	200,271,012	\$	194,667,564		

Note 1 - Description of the Plan

The following description of Lansing Board of Water and Light Defined Contribution Plan and Trust 1 ("Plan") provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

General – The Plan was established by the BWL in 1997 under Section 5–203 of the City Charter. Prior to its establishment, the BWL sponsored a defined benefit plan (Plan for Employees' Pensions of the Board of Water and Light – City of Lansing, Michigan – Defined Benefit Plan) in which substantially all employees of the BWL were participants. Effective December 1, 1997, all active participants of the defined benefit plan were required to make an irrevocable choice to either remain in the defined benefit plan or move to the newly established defined contribution plan (Lansing Board of Water and Light Employees' Defined Contribution Plan). Those participants who elected to move to the defined contribution plan received lump-sum distributions from the defined benefit plan, which were rolled into their accounts in the new defined contribution plan. Of the 760 active participants who were required to make this election, 602 elected to convert their retirement benefits to the newly established defined contribution plan. As a result of this action, effective December 1, 1997, the Board of Commissioners transferred \$75,116,470 to the newly established defined contribution plan, reflecting the plan participants' accumulated benefits as of said date.

ICMA-RC, the Plan recordkeeper, is responsible for Plan administration and processing of participant investments.

Contributions – For employees hired before January 1, 1997, the BWL is required to contribute 15 percent of the employees' compensation. For employees hired on or after January 1, 1997, the BWL is required to contribute 9.5 percent of the employees' compensation. In addition, the BWL is required to contribute an additional 3.0 percent of the employees' compensation for all employees who are not eligible to receive overtime pay and 0.5 percent of the employees' compensation for all non-bargaining employees. The Board of Commissioners of the Board of Water and Light – City of Lansing may amend the Plan's provisions and contribution requirements.

Note 1 - Description of the Plan (Continued)

Participant Accounts – Each participant's account is credited with the participant's rollover contributions and withdrawals, as applicable, and allocations of the BWL's contributions and Plan earnings. Allocations are based on participants' earnings or account balances, as defined in the Plan document. Forfeited balances of terminated participants' non-vested accounts are used to reduce future BWL contributions. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

As of June 30, 2019, there were 936 participants in the Plan, of which 665 were active employees. As of June 30, 2018, there were 918 participants in the Plan, of which 679 were active employees.

Vesting – Participants start to become vested in the BWL contribution and related earnings after completing two years of service, at a rate of 25 percent each year. Participants become fully vested after six years of service or upon obtaining 55 years of age.

Investment Options – Participants may direct contributions in any of the following investment options, which are administered by ICMA-RC. Since ICMA-RC is the custodian as defined by the Plan, transactions in the ICMA funds qualify as transactions with parties in interest.

Stable Value – Seeks safety of principal, adequate liquidity, and returns superior to shorter maturity alternatives by actively managing a diversified portfolio of assets issued by highly rated financial institutions and corporations as well as obligations of the U.S. government or its agencies.

Balanced - Seeks both current income and capital appreciation by investing in a combination of stocks, bonds, and money market instruments.

Growth – Seeks long-term capital appreciation by investing primarily in equity securities of companies with above-average growth prospects. Current income is a secondary concern.

Note 1 - Description of the Plan (Continued)

International - Seeks long-term capital appreciation by investing primarily in equity securities of issuers located outside of the U.S.

Stock Funds - Seeks long-term growth through capital gains, although historically dividends have been an important source of total return. These funds primarily invest in the common stocks of companies based in the United States. There are many options for diversification within this category.

Bond and Equity Funds - Seeks to maximize current income with capital appreciation as a secondary consideration by investing primarily in debt securities issued by the U.S. government or its agencies and domestic and foreign corporations. They are not fixed-income investments. Even when a mutual fund's portfolio is composed entirely of bonds, the fund itself has neither a fixed yield nor a contractual obligation to give investors back their principal at some later maturity date – the two key fixed characteristics of individual bonds.

Guaranteed Lifetime Income fund: The Retirement Income Advantage Fund seeks both moderate capital growth and current income. It invests in a separate account under a group variable annuity. The separate account, in turn, invests in a mix of registered funds and a collective trust fund with an allocation of approximately 60% domestic and foreign equities and 40% fixed income.

Self-directed Brokerage Account: Participants with a minimum account balance of \$35,000 may transfer from their fund accounts a minimum of \$5,000 to a self-directed brokerage account. Eligible investments are equity securities traded on U.S. exchanges valued at greater than \$5 and over 400 mutual funds from 18 investment management companies. Participants pay a one-time set-up fee of \$50.

Participant Notes Receivable – Participants may borrow from their fund accounts a minimum of \$1,000 up to a maximum of the lesser of \$50,000 or 50 percent of their account balances. Notes receivable are treated as transfers between the investment fund and the notes receivable fund. Note terms range from one to five years or up to 20 years for the purchase of a primary residence. The notes receivable are secured by the balance in the participant's account and bear interest at a rate commensurate with prevailing rates as determined periodically by the Plan administrator. Principal and interest are paid ratably through payroll deductions.

Note 1 - Description of the Plan (Continued)

Payment of Benefits – Upon termination of service, a participant may elect to receive either a lump-sum amount equal to the value of the participant's vested interest in his or her account, or choose from a variety of periodic payment options. Upon reaching normal retirement age, a participant may elect to receive in service distributions.

Note 2 - Summary of Significant Accounting Policies

Basis of Accounting – Fiduciary funds use the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions to the Plan are recognized when due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

Valuation of Investments and Income Recognition – The investments are stated at fair value based on closing sales prices reported on recognized securities exchanges on the last business day of the year, or for listed securities having no sales reported, and for unlisted securities, upon the last reported bid prices on that date. The mutual funds are valued at quoted market prices, which represent the net asset values of shares held by the Plan at year-end.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is accrued when earned. Dividend income is recorded on the ex-dividend date.

Note 2 - Summary of Significant Accounting Policies (Continued)

Participant Notes Receivable – Participant notes receivable are recorded at their unpaid principal balances plus any accrued interest. Participant notes receivable are written off when deemed uncollectible.

Expenses - Substantially all Plan expenses are paid by Plan participants.

Regulatory Status – The Plan is not subject to the reporting requirements of the Employee Retirement Income Security Act of 1974 (ERISA) as it has been established for the benefit of a governmental unit.

Note 3 - Investments

The pension trust fund is authorized by Michigan Public Act 314 of 1965, as amended, to invest in certain reverse repurchase agreements, stocks, diversified investment companies, annuity investment contracts, real estate leased to public entities, mortgages, real estate, debt or equity of certain small businesses, certain state and local government obligations, and certain other specified investment vehicles.

The Plan's deposits and investment policies are in accordance with PA 196 of 1997 and have authorized the investments according to Michigan PA 314 of 1965, as amended.

Custodial Credit Risk of Bank Deposits - As of June 30, 2019 and 2018, the Plan has no bank deposits.

Credit Risk - Credit risk is the risk an issuer or other counterparty to an investment will not fulfill its obligations. As of June 30, 2019, the credit quality ratings of debt securities are as follows:

Investment	Fair Value	Rating	Rating Organization
Mutual funds	\$ 147,768,040	Not rated	Not rated
Stable value	36,352,914	AA	S&P

Note 3 – Investments (Continued)

As of June 30, 2018, the credit quality ratings of debt securities are as follows:

Investment		Dating	Rating
Investment	Fair Value	Rating	<u>Organization</u>
Mutual funds	\$145,098,563	Not rated	Not rated
Stable value	35,135,911	AA-	S&P

Interest Rate Risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of investments. The Plan's investment policy does not address this risk. At June 30, 2019, the average maturities of investments are as follows:

		Weighted
<u>Investment</u>	<u>Fair Value</u>	<u>Average Maturity</u>
Mutual funds – Bond funds	\$17,172,978	4.9 years

At June 30, 2018, the average maturities of investments are as follows:

		Weighted
<u>Investment</u>	<u>Fair Value</u>	<u>Average Maturity</u>
Mutual funds – Bond funds	\$18,870,972	4.8 years

Note 4 - Plan Termination

Although it has not expressed any intention to do so, the BWL has the right under the provisions set forth in Article 14 of the Plan to terminate the Plan. In the event of any termination of the Plan, or upon complete or partial discontinuance of contributions, the accounts of each affected participant shall become fully vested.

Note 5 - Tax Status

The Plan is a prototype plan. The prototype plan has received a favorable opinion letter from the Internal Revenue Service (IRS) that the prototype plan, as designed, is qualified for federal income tax-exempt status. The Plan has not individually sought its own determination letter.

Note 6 – Fair Value Measurements

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy under authoritative guidance are described as follows:

- Level 1 Inputs to the valuation methodology are unadjusted quoted market prices for identical assets in active markets that the Plan has the ability to access.
- Level 2 Inputs to the valuation methodology include:
 - > quoted prices for similar assets or liabilities in active markets;
 - quoted prices for identical or similar assets or liabilities in inactive markets;
 - > inputs other than quoted prices that are observable for the asset or liability;
 - inputs that are derived principally from or corroborated by observable market data by correlation or other means; and
 - > if the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Note 6 – Fair Value Measurements (Continued)

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observables and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at June 30, 2019 and 2018:

Money market fund, growth funds, and international funds: Valued at the quoted net asset value ("NAV") of shares held by the Plan at year-end.

Common stock and bond and equity funds: Valued at the most recent closing price reported on the market on which individual securities are traded.

Mutual funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily NAV and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

Stable value fund: The Vantagepoint Fund is a collective fund that seeks to maintain a stable net asset value. It invests primarily in a diversified portfolio of stable-value investments, including traditional guaranteed investment contracts (traditional GICs), separate account GICs, synthetic GICs backed by fixed income securities or investments, and short-term investment funds, including money market mutual funds.

Guaranteed Lifetime Income fund: The Vantage Trust Retirement Income Advantage Fund seeks both moderate capital growth and current income. It invests in a separate account under a group variable annuity. The separate account, in turn, invests in a mix of registered funds and a collective trust fund with an allocation of approximately 60% domestic and foreign equities and 40% fixed income.

Note 6 – Fair Value Measurements (Continued)

Self-directed brokerage account: The self-directed brokerage account allows participants of the Plan the option of selecting a more personalized and broad range of investment choices. The investments within the account consist of corporate stocks, which are valued at the most recent closing price reported on the market on which individual securities are traded.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of June 30, 2019 and 2018:

	June 30, 2019							
Investment Type		Level 1		Level 2		Level 3		Total
Mutual funds:								
Money market	\$	541,492	\$	-	\$	-	\$	541,492
Bond and equity funds		17,172,978		-		-		17,172,978
Stock funds		61,192,842		-		-		61,192,842
Balanced funds		53,135,058		-		-		53,135,058
Growth funds		-		-		-		-
International funds		15,725,670		-		-		15,725,670
Self-directed brokerage account		3,787,956				_		3,787,956
Total Investments by Fair Value								
Level	\$ 1	51,555,996	\$	_	\$	_	\$	151,555,996
Investments measured at the net								
asset value (NAV)								
Stable value							\$	36,352,914
Guaranteed Lifetime Income								8,940,026
Total Investments Measured								<u> </u>
at Fair Value							\$	196,848,936
							<u> </u>	,,

Lansing Board of Water and Light Defined Contribution Plan and Trust 1

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 6 – Fair Value Measurements (Continued)

	June 30, 2018								
Investment Type	Level 1			Level 2		Level 3	Total		
Mutual funds:	\$	202.087	¢		¢		¢	202.087	
Money market	Þ	303,087	\$	-	\$	-	\$	303,087	
Bond and equity funds		18,870,972		-		-		18,870,972	
Stock funds		70,845,546		-		-		70,845,546	
Balanced funds		30,528,873		-		-		30,528,873	
Growth funds		6,933,676		-		-		6,933,676	
International funds		17,616,409		-		-		17,616,409	
Self-directed brokerage account		2,144,556		_		_		2,144,556	
Total Investments by Fair Value									
Level	\$	147,243,119	\$		\$	_	\$	147,243,119	
Investments measured at the net asset value (NAV)									
Stable value							\$	35,135,911	
Guaranteed Lifetime Income Total Investments Measured								8,638,662	
at Fair Value							\$	191,017,692	

Investments Measured Using NAV per Share Practical Expedient: The stable value fund and guaranteed lifetime income fund use NAV per share as a practical expedient to measuring fair value. The stable value fund had a fair value of \$36,352,914 and \$35,135,911 as of June 30, 2019 and 2018, respectively and the guaranteed lifetime income fund had a fair value of \$8,940,026 and \$8,638,662, respectively. These funds have no unfunded commitments, the redemption frequency is daily, and there is no redemption notice period.

Note 7 – Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the Statement of Fiduciary Net Position.

Note 8 – Subsequent Events

The Plan has evaluated subsequent events occurring through the date that the Plan's financial statements were approved and available to be issued, for events requiring recording or disclosure in the Plan's financial statements. There are no subsequent events warranting disclosures.

plante moran | Financial Advisors

Lansing Board of Water & Light 401(a) Plans

Investment Review

Advising Team: Plante Moran Financial Advisors pmfainstitutional@plantemoran.com

Second Quarter 2019



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PMFA Market Perspectives - Quarterly Commentary Second Quarter 2019

"Be not afraid of growing slowly; be afraid only of standing still."

Chinese Proverb

Although the first report on second quarter GDP is still a few weeks away, all indications are that the economy slowed in recent months. Still, it is now a foregone conclusion that the economy has entered uncharted territory as the longest expansion in the U.S., having reached ten years last month. Even on the heels of this record run, the economy may be experiencing a slowdown in growth, but it is not standing still.

The signs of moderation in growth and inflation expectations have prompted a marked shift in tone from the Federal Reserve in recent months. Coming out of the June FOMC meeting, the Fed signaled that it was prepared to trim its benchmark policy rate as soon as July. Lower rates were almost out of the question even late last year, when both Fed forecasts and market expectations called for multiple rate hikes in 2019. That now appears to be off the table. Markets cheered Fed chair Jerome Powell's indication that the Fed will "act as appropriate to sustain the expansion," implying that risk assets have the Fed on their side.

The dovish shift in tone from policy makers helped to support equity market returns during the quarter, adding to the robust gains since the beginning of the year. U.S. stocks gained 4.1% in Q2, lifting YTD returns to 18.7%. Bonds also rallied, as long-term yields fell sharply, bringing Q2 performance for the Bloomberg Barclays Aggregate Bond Index to an impressive 3.1% (6.1% year to date).

A similar narrative has unfolded outside of the U.S., as economic growth abroad has also shown signs of slowing. Much like the Fed, global central banks have also turned increasingly dovish. The result? International equity markets also delivered solid performance, up 3.0% during the quarter, building on strong first-quarter gains to return 13.6% for the first half of the year. With global growth expected to rebound in the second half of the year (supported by more accommodative monetary policy), and valuations for international equities remaining attractive, we continue to believe international equities play a meaningful role in a well-diversified global portfolio.

Although equity markets delivered positive results during the quarter, those gains came with an uptick in volatility. Trade tensions escalated as the Trump administration threatened to impose further tariffs on several of the country's largest trading partners, most notably China. Stalled trade talks between the two countries resumed at the G20 summit in Japan in late June, with an apparent truce reached in the form of an agreement to temporarily hold off on imposing additional tariffs. Whether that creates an opening for negotiations to move forward constructively toward an eventual deal remains to be seen, but most believe that much work remains to be done and a near-term breakthrough is unlikely. The bottom line is that trade is likely to remain a source of uncertainty and potential volatility for some time. Still, any indications that progress is being made toward a new treaty would almost certainly provide a boost to investor sentiment and global equity performance.

After such a strong start to the year, many equity investors may be wondering whether the bull market still has steam. It's typically easy to identify what could go wrong (trade, geopolitics, slowing economic growth, etc.), but investors often find it more difficult to identify the many things that can go right. Any number of risks are unquestionably present today, but many catalysts for continued growth (strong labor market, supportive monetary policy, reasonable equity valuations, solid consumer spending/sentiment, etc.) are also present. As we noted in our Road Ahead commentary last December, there is a key distinction between slower growth and no growth. A broad swathe of data still indicates that the economy is growing.

It may be hard to be excited about slower growth, but – to paraphrase the Chinese proverb above – investors shouldn't fear it. Those who focus solely on the potential downside may be tempted to de-risk their portfolio. However, history has shown that pulling money out of the market at the wrong time can be costly, as the market typically produces positive returns, even in the latter stages of the economic cycle. While volatility tends to increase in late-cycle environments, investors would be well served to look through any volatility and make investment decisions within the context of their long-term goals and objectives, risk tolerance, targeted rate of return, and investment time horizon.

For a more detailed discussion around our current views, we encourage you to explore our ongoing thought leadership, by visiting the <u>"Wealth Management/Our Thinking</u>" section of our website, <u>plantemoran.com</u>. Access to these insights will also be delivered to you via our monthly "Learn, Lead, Legacy" email, which includes timely updates surrounding Wealth Management and Plante Moran. Please contact your relationship manager if you would like to subscribe.

Administrative Matters

We have provided this information regarding your account(s) based on sources we believe to be reliable and accurate. We urge you to take a moment to compare the account balances and positions contained in your report to those balances reflected on the statements that you receive directly from your account's custodian. Please contact us or the account custodian with any questions you may have. Also, please notify us promptly



PMFA Market Perspectives - Quarterly Commentary Second Quarter 2019

if you do not receive statements on all accounts from the custodian on at least a quarterly basis.

ADV Part 2A Offer

Included with this report is an updated Form ADV Part 2A Material Change page. Previously, we provided you with a complete copy of our Form ADV Part 2A that provided important information about our current organizational structure, breadth of services, the investment philosophy that we employ, and our fee structure. If you would like a copy of our current Form ADV Part 2A, please contact your relationship manager or send an email request to <u>dave.doyle@plantemoran.com</u>. You may also obtain a copy by visiting our website <u>plantemoran.com</u>. Additional information about PMFA is also available via the SEC's website <u>adviserinfo.sec.gov</u>. The SEC's website also provides information about any persons affiliated with PMFA who are registered as investment adviser representatives of PMFA.

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PMFA shall have no obligation or authority to take any action or render any advice with respect to the voting of proxies or other voting decisions/actions regarding investments solicited by or with respect to issuers of securities held in client accounts (including but not limited to tender offers, proposed mergers, rights offerings, exchange offers, warrants and other corporate actions).

Very truly yours,

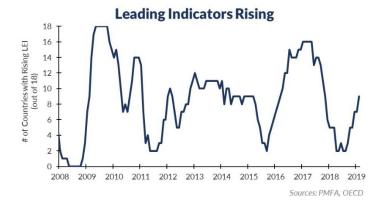
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FINANCIAL ADVISORS

This report is prepared solely to help you with your investment planning. Accordingly, it may be incomplete or contain other departures from generally accepted accounting principles and should not be used to obtain credit or for any purposes other than your investment planning. We have not performed an audit, review, or compilation engagement in accordance with standards established by the American Institute of Certified Public Accountants.



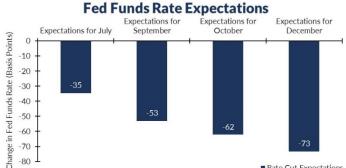
Is a pickup in global growth on the horizon?



Across the globe economic data has weakened over recent quarters, prompting concern amongst investors. Looking beyond the recent weakness, leading indicators, intended to forecast future economic activity, suggest growth is picking up in several countries. In fact, 9 of the 18 largest countries (as measured by GDP) have leading indicators that were rising as of April. This is coming off a recent low at the end of last summer, where only two countries had rising leading indicators. With this in mind, short-term recessionary concerns may be overblown.

Furthermore, easing trade tensions, the dovish shift from several central banks, and contained inflationary pressures should all be supportive as we look ahead. While global economic growth may have recently softened, a modest rebound could be on the horizon.

What will be the Fed's next move?



Rate Cut Expectations Expectations are the weighted average for the meeting as of 6/19/2019 Sources: PMFA, CME Group

The Federal Reserve's June announcement affirmed what the markets had anticipated: a potential reversal in its long-standing tightening bias may be close. The Fed's core message on the economy remained generally positive -sufficiently so for policymakers to conclude that rates should be left unchanged. Still, the acknowledgement of increased uncertainty was a meaningful shift, as were the updated projections indicating that nearly half of the central bank's policy making committee expect the need to cut rates before the end of the year.

Since the announcement, market expectations (via Fed funds futures) have moved to effectively reflect a 100% expectation for a July rate cut of at least a quarter-point and a nearly 70% probability that the Fed will trim by at least 0.75% this year. In May, that probability was only about 25%. The sharp reversal in sentiment has come amid increased trade tensions, more tepid growth expectations, and persistently low inflation.

Policymakers are hinting strongly at a rate cut, and market consensus is now overwhelmingly tilting in that direction. The question is whether the Fed's shift reflects a gloomier outlook or a preemptive move to avoid such a scenario.



JIM BAIRD CPA, CFP[®], CIMA[®] Partner Chief Investment Officer



TRICIA NEWCOMB CIMA[®] Associate Senior Strategy Analyst



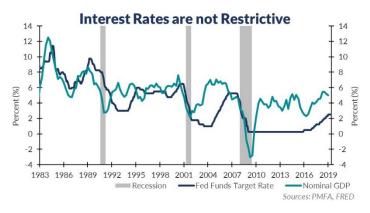
ERIC DAHLBERG CFA Associate Senior Equity Analyst



PAUL OLMSTEAD CIMA[®] Associate Senior Fixed Income Analyst



What would a rate cut signal for the near-term economic outlook?



In response to recent softening in the economic outlook, the Federal Reserve has now clearly opened the door to cut its policy rate in an effort to stimulate the economy. In turn, investors may question what a rate cut may signal about the Fed's rationale for trimming rates and about the expansion's durability.

It's important to understand the rationale for any potential Fed easing in context. Growth has moderated, but the baseline view is for continued expansion. Recent recessions were preceded by Fed tightening that pushed short-term interest rates above the rate of nominal GDP growth. As illustrated above, that is far from the case today.

In the graph above, we would highlight two mid-cycle rate cuts of note in the 1990s. In 1995, the Fed eased following a 16-month period in which it had doubled its short-term policy rate and long-term yields had declined. An additional cut in 1998 was intended to provide stability in direct response to the Asian financial crisis. Following those cuts, nominal GDP accelerated by more than 1.5%, helping to extend an expansion that would go on to set a record for its length.

Can the Fed do it again? It increasingly appears that is what policymakers have in mind.

Could easy financial conditions help to moderate an economic slowdown?



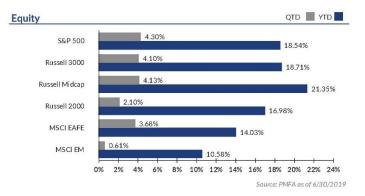
Recent mixed economic data has stoked concerns among investors that growth is slowing and that recession risk has risen. As a result, the latest comments by the Fed have been noteworthy, as policymakers have indicated they may be willing to ease conditions by cutting interest rates if incoming data remains sluggish.

Even without a cut, financial conditions have already become more accommodative in recent months, as credit spreads and interest rates have broadly fallen. With financial conditions loosening, the environment could be (and typically has been) increasingly positive for risk assets, including equities. Additionally, if the Fed were to cut rates, conditions could be perceived as even more attractive, so long as economic data doesn't materially deteriorate. Historically, stocks have done well as financial conditions eased. Recently, financial markets have started to price in that potential, which also creates a potential risk should the Fed ultimately not deliver a rate reduction as expected.

The bottom line is that if economic data continues to disappoint, the probability of a Fed rate cut will remain high. Easy financial conditions combined with a willingness by the Fed to trim rates, if appropriate, could provide additional "insurance" to create a soft landing for the economy, extending the current expansion.



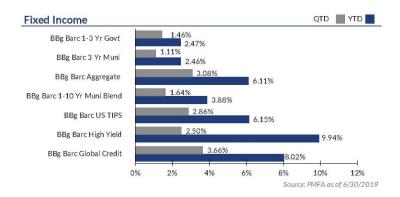
Equity performance (ended 6/30/19)



In spite of a volatile quarter, equities were up broadly over Q2, particularly in the U.S., with all major indices posting postitive returns. Markets are up notably since the beginning of the year, with the S&P 500 returning nearly 19% year to date.

The quarter started out on a strong note, with equity markets reaching record highs as strong earnings reports and solid economic data eased recession concerns. However, trade tensions between the U.S. and China heated up in early May causing markets to sell off. Stocks then saw a strong rebound in June as trade talks between the U.S. and China resumed, fueling hopes that tensions between the two countries may subside.

Fixed income performance (ended 6/30/19)



Fixed income markets also saw strong returns over the quarter, as long-term yelds fell significantly over the period providing a boost to bond prices. The Bloomberg Barclays Aggregate Index returned more than 3% over the period, bringing its total performance to 6.11% year to date.

Credit spreads tightened over the quarter as well, as investors continued to take on more risk, particularly in June. As a result, credit oriented sectors also saw strong performance, with the Bloomberg Barclays Global Credit Index rising 3.66% over the period. High yield bonds remain the strongest performing sector year to date, with a total return of nearly 10% as of the end of June.

Disclosures:

Past performance does not guarantee future results. All investments include risk and have the potential for loss as well as gain.

Data sources for peer group comparisons, returns, and standard statistical data are provided by the sources referenced and are based on data obtained from recognized statistical services or other sources believed to be reliable. However, some or all of the information has not been verified prior to the analysis, and we do not make any representations as to its accuracy or completeness. Any analysis nonfactual in nature constitutes only current opinions, which are subject to change. Benchmarks or indices are included for information purposes only to reflect the current market environment; no index is a directly tradable investment. There may be instances when consultant opinions regarding any fundamental or quantitative analysis may not agree.

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		Trailir	ng Returns as	s of June 30,	2019			Calenda	r Year Retur	ns	
-	Quarter To Date	Year To Date	Annualized Latest 1 Year	Annualized Latest 3 Years	Annualized Latest 5 Years	Annualized Latest 10 Years	2018	2017	2016	2015	2014
Fixed Income											
Bloomberg Barclays 1-3 Yr Government	1.46	2.47	4.02	1.31	1.23	1.23	1.58	0.45	0.87	0.57	0.64
Bloomberg Barclays 3 Yr Municipal	1.11	2.46	3.48	1.46	1.44	1.94	1.76	1.56	0.08	1.18	1.22
Bloomberg Barclays U.S. Aggregate Bond	3.08	6.11	7.87	2.31	2.95	3.90	0.01	3.54	2.65	0.55	5.97
Bloomberg Barclays 1-10 Year Muni	1.64	3.88	5.49	2.06	2.55	3.37	1.64	3.49	-0.10	2.45	4.66
Bloomberg Barclays U.S. Treasury U.S. TIPS	2.86	6.15	4.84	2.08	1.76	3.64	-1.26	3.01	4.68	-1.44	3.64
Equity											
Russell 3000	4.10	18.71	8.98	14.02	10.19	14.67	-5.24	21.13	12.74	0.48	12.56
Russell 3000 Growth	4.50	21.41	10.60	17.81	13.02	16.13	-2.12	29.59	7.39	5.09	12.44
Russell 3000 Value	3.68	16.05	7.34	10.19	7.31	13.14	-8.58	13.19	18.40	-4.13	12.70
S&P 500	4.30	18.54	10.42	14.19	10.71	14.70	-4.38	21.83	11.96	1.38	13.69
S&P 500 Sec/Cons Disc	5.28	21.84	10.17	16.74	13.97	19.72	0.83	22.98	6.03	10.11	9.68
S&P 500 Sec/Cons Staples	3.72	16.18	16.39	4.84	8.39	12.83	-8.38	13.49	5.38	6.60	15.98
S&P 500 Sec/Energy	-2.83	13.13	-13.25	0.20	-5.54	5.01	-18.10	-1.01	27.36	-21.12	-7.78
S&P 500 Sec/Financials	8.00	17.24	6.31	16.42	10.58	13.09	-13.03	22.18	22.80	-1.53	15.20
S&P 500 Sec/Health Care	1.38	8.07	12.99	10.82	10.61	15.52	6.47	22.08	-2.69	6.89	25.34
S&P 500 Sec/Industrials	3.57	21.38	10.43	12.46	9.28	15.59	-13.29	21.03	18.86	-2.53	9.83
S&P 500 Sec/Information Technology	6.06	27.13	14.34	26.20	18.53	18.57	-0.29	38.83	13.85	5.92	20.12
S&P 500 Sec/Materials	6.31	17.26	3.20	10.38	5.44	11.39	-14.70	23.84	16.69	-8.38	6.91
S&P 500 Sec/Communication Services	4.49	19.09	13.66	0.58	5.34	9.85	-12.53	-1.25	23.49	3.40	2.99
S&P 500 Sec/Utilities	3.48	14.70	19.03	8.05	10.00	12.17	4.11	12.11	16.29	-4.85	28.98
Russell Mid Cap	4.13	21.35	7.83	12.16	8.63	15.16	-9.06	18.52	13.80	-2.44	13.22
Russell 2000	2.10	16.98	-3.31	12.30	7.06	13.45	-11.01	14.65	21.31	-4.41	4.89
MSCI EAFE	3.68	14.03	1.08	9.11	2.25	6.90	-13.79	25.03	1.00	-0.81	-4.90
MSCI ACWI Ex U.S.	2.98	13.60	1.29	9.39	2.16	6.54	-14.20	27.19	4.50	-5.66	-3.87
MSCI EAFE Local	2.80	13.68	2.17	9.80	5.85	8.35	-10.99	15.23	5.34	5.33	5.92
MSCIEM	0.61	10.58	1.21	10.66	2.49	5.81	-14.57	37.28	11.19	-14.92	-2.19
Alternatives											
Barclays High Yield	2.50	9.94	7.48	7.52	4.70	9.24	-2.08	7.50	17.13	-4.47	2.45
Barclays Global Credit	3.66	8.02	7.55	3.99	2.45	5.20	-3.29	9.19	5.43	-3.39	2.43
HFRX Global Hedge Fund	1.58	4.22	-1.95	2.12	-0.11	1.42	-6.72	5.99	2.50	-3.64	-0.58
Bloomberg Commodity TR	-1.19	5.06	-6.75	-2.18	-9.15	-3.74	-11.25	1.70	11.77	-24.66	-17.01

Source: PMFA

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Lansing Board of Water & Light 401(a) Plans Investment Style Summary

Domestic Equity Investment Options

	Value	Blend	Growth
Large	JHancock Disciplined Value R6	Fidelity® 500 Index	Fidelity® Contrafund® MainStay Large Cap Growth I
Medium		Fidelity® Mid Cap Index JPMorgan Mid Cap Value R6	T. Rowe Price Instl Mid-Cap Equity Gr
Small	American Beacon Small Cap Value R6	Fidelity® Small Cap Index	AMG TimesSquare Small Cap Growth N

Fixed Income Investment Options

Money Market/Stable Value	Broad Fixed Income (Core)	Other Fixed Income (Non-Core)
Cash	PIMCO Total Return A	PIMCO Real Return Instl
Vantagepoint PLUS Fund R10	Fidelity® US Bond Index	PIMCO Income Instl

Other Investment Options

International/World Equity	Target Date	Other
Oakmark International Advisor Vanguard Total Intl Stock Index Admiral American Funds Europacific Growth R6 Vanguard International Growth Adm American Funds Capital World Gr&Inc R6	Vanguard Target Retirement Income Inv VT Retirement IncomeAdvantage Vanguard Target Retirement 2015 Inv Vanguard Target Retirement 2020 Inv Vanguard Target Retirement 2025 Inv Vanguard Target Retirement 2030 Inv Vanguard Target Retirement 2035 Inv Vanguard Target Retirement 2040 Inv Vanguard Target Retirement 2045 Inv Vanguard Target Retirement 2050 Inv Vanguard Target Retirement 2050 Inv Vanguard Target Retirement 2055 Inv Vanguard Target Retirement 2060 Inv Vanguard Target Retirement 2065 Inv	Fidelity® Balanced Nuveen Real Estate Securities I



Lansing Board of Water & Light 401(a) Plans **Investment Balances**

	Q2 20	19	Q1 20	019	Q4 2	018	Q3 2	018	
Fund	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Quarter Change
Cash	\$544,894	0.27%	\$492,238	0.25%	\$458,599	0.25%	\$314,756	0.16%	0.02%
Vantagepoint PLUS Fund R10	\$37,780,842	18.85%	\$39,111,404	19.86%	\$0	0.00%	\$0	0.00%	-1.00%
Vantagepoint PLUS Fund R5	\$0	0.00%	\$0	0.00%	\$37,992,799	20.84%	\$37,441,465	18.64%	0.00%
PIMCO Total Return A	\$4,215,205	2.10%	\$4,063,881	2.06%	\$0	0.00%	\$0	0.00%	0.04%
PIMCO Total Return Instl	\$0	0.00%	\$0	0.00%	\$7,425,105	4.07%	\$8,186,713	4.07%	0.00%
PIMCO Low Duration Instl	\$0	0.00%	\$0	0.00%	\$446,591	0.24%	\$451,770	0.22%	0.00%
Fidelity® US Bond Index	\$8,932,339	4.46%	\$7,566,169	3.84%	\$0	0.00%	\$0	0.00%	0.62%
Vanguard Total Bond Market Index Adm	\$0	0.00%	\$0	0.00%	\$6,111,149	3.35%	\$4,542,223	2.26%	0.00%
PIMCO Real Return Admin	\$0	0.00%	\$0	0.00%	\$2,292,010	1.26%	\$2,363,149	1.18%	0.00%
PIMCO Real Return Instl	\$2,368,925	1.18%	\$2,267,983	1.15%	\$0	0.00%	\$0	0.00%	0.03%
PIMCO Income Instl	\$1,747,312	0.87%	\$2,366,946	1.20%	\$0	0.00%	\$0	0.00%	-0.33%
Delaware High-Yield Opportunities In	\$0	0.00%	\$0	0.00%	\$3,220,556	1.77%	\$3,504,080	1.74%	0.00%
VT III Vantagepoint Model Port Cnsrv Gr	\$0	0.00%	\$0	0.00%	\$938,228	0.51%	\$994,026	0.49%	0.00%
Fidelity® Balanced	\$4,882,476	2.44%	\$4,603,959	2.34%	\$4,441,491	2.44%	\$0	0.00%	0.10%
Franklin Managed Income A	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$4,966,395	2.47%	0.00%
VT III Vantagepoint Model Port Trdtl Gr	\$0	0.00%	\$0	0.00%	\$5,647,138	3.10%	\$6,115,014	3.04%	0.00%
VT III Vantagepoint Model Port L-T Gr	\$0	0.00%	\$0	0.00%	\$6,461,046	3.54%	\$7,301,318	3.63%	0.00%
BlackRock Global Allocation Inv A	\$0	0.00%	\$0	0.00%	\$985,158	0.54%	\$1,042,892	0.52%	0.00%
AllianzGI NFJ Dividend Value P	\$0	0.00%	\$0	0.00%	\$6,368,768	3.49%	\$7,905,515	3.93%	0.00%
JHancock Disciplined Value R6	\$7,433,493	3.71%	\$7,316,513	3.72%	\$0	0.00%	\$0	0.00%	-0.01%
Vantagepoint Equity Income R5	\$0	0.00%	\$0	0.00%	\$2,038,689	1.12%	\$1,225,863	0.61%	0.00%
American Funds Fundamental Invs R5	\$0	0.00%	\$0	0.00%	\$2,237,851	1.23%	\$2,767,930	1.38%	0.00%
Fidelity® 500 Index	\$15,231,312	7.60%	\$15,452,569	7.85%	\$0	0.00%	\$0	0.00%	-0.24%
JPMorgan US Equity I	\$0	0.00%	\$0	0.00%	\$578,963	0.32%	\$685,568	0.34%	0.00%
Vanguard 500 Index Admiral	\$0	0.00%	\$0	0.00%	\$8,404,384	4.61%	\$9,410,487	4.68%	0.00%

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Lansing Board of Water & Light 401(a) Plans **Investment Balances**

	Q2 20)19	Q1 20	019	Q4 2	018	Q3 2	018	
Fund	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Quarter Change
American Funds Growth Fund of Amer R5	\$0	0.00%	\$0	0.00%	\$5,586,891	3.06%	\$6,378,633	3.17%	0.00%
Fidelity® Contrafund®	\$8,090,610	4.04%	\$7,772,315	3.95%	\$6,878,415	3.77%	\$8,488,344	4.22%	0.09%
MainStay Large Cap Growth I	\$6,936,065	3.46%	\$6,492,861	3.30%	\$0	0.00%	\$0	0.00%	0.16%
Fidelity® Mid Cap Index	\$4,662,263	2.33%	\$4,272,965	2.17%	\$0	0.00%	\$0	0.00%	0.16%
JPMorgan Mid Cap Value R6	\$76,393	0.04%	\$5,857	0.00%	\$0	0.00%	\$0	0.00%	0.04%
Vanguard Mid Cap Index Admiral	\$0	0.00%	\$0	0.00%	\$2,886,730	1.58%	\$3,237,788	1.61%	0.00%
Westwood SMidCap Institutional	\$0	0.00%	\$0	0.00%	\$331,403	0.18%	\$396,882	0.20%	0.00%
Harbor Mid Cap Growth Admin	\$0	0.00%	\$0	0.00%	\$7,819,749	4.29%	\$10,169,945	5.06%	0.00%
T. Rowe Price Instl Mid-Cap Equity Gr	\$10,265,728	5.12%	\$9,591,131	4.87%	\$0	0.00%	\$0	0.00%	0.25%
American Beacon Small Cap Value R6	\$2,226,539	1.11%	\$2,335,921	1.19%	\$0	0.00%	\$0	0.00%	-0.07%
Columbia Small Cap Value I Inst	\$0	0.00%	\$0	0.00%	\$1,610,285	0.88%	\$2,547,526	1.27%	0.00%
Columbia Small/Mid Cap Value Adv	\$0	0.00%	\$0	0.00%	\$541,438	0.30%	\$712,901	0.35%	0.00%
Fidelity® Small Cap Discovery	\$0	0.00%	\$0	0.00%	\$919,023	0.50%	\$1,114,132	0.55%	0.00%
Fidelity® Small Cap Index	\$4,230,066	2.11%	\$4,457,840	2.26%	\$0	0.00%	\$0	0.00%	-0.15%
Vanguard Small Cap Index Adm	\$0	0.00%	\$0	0.00%	\$2,289,271	1.26%	\$2,484,647	1.24%	0.00%
AMG TimesSquare Small Cap Growth N	\$1,922,960	0.96%	\$1,790,346	0.91%	\$1,889,472	1.04%	\$2,348,938	1.17%	0.05%
AllianzGI Technology Administrative	\$0	0.00%	\$0	0.00%	\$5,364,996	2.94%	\$7,256,760	3.61%	0.00%
PGIM Jennison Utility A	\$0	0.00%	\$0	0.00%	\$1,832,918	1.01%	\$1,968,467	0.98%	0.00%
T. Rowe Price Health Sciences	\$0	0.00%	\$0	0.00%	\$5,226,481	2.87%	\$6,358,491	3.16%	0.00%
Harbor International Administrative	\$0	0.00%	\$0	0.00%	\$762,905	0.42%	\$927,606	0.46%	0.00%
Oakmark International Advisor	\$67,592	0.03%	\$29,719	0.02%	\$0	0.00%	\$0	0.00%	0.02%
Vanguard Total Intl Stock Index Admiral	\$2,083,031	1.04%	\$1,853,460	0.94%	\$0	0.00%	\$0	0.00%	0.10%
American Funds Europacific Growth R6	\$1,294,222	0.65%	\$968,518	0.49%	\$0	0.00%	\$0	0.00%	0.15%
Fidelity® Diversified International	\$0	0.00%	\$0	0.00%	\$1,047,784	0.57%	\$1,025,554	0.51%	0.00%
Fidelity® International Discovery	\$0	0.00%	\$0	0.00%	\$800,846	0.44%	\$800,557	0.40%	0.00%

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Lansing Board of Water & Light 401(a) Plans Investment Balances

	Q2 20	19	Q1 20	19	Q4 20)18	Q3 2	018	
Fund	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Quarter Change
Vanguard International Growth Adm	\$2,485,599	1.24%	\$2,928,167	1.49%	\$0	0.00%	\$0	0.00%	-0.25%
Nuveen Real Estate Securities I	\$1,270,408	0.63%	\$1,238,755	0.63%	\$1,129,556	0.62%	\$1,239,568	0.62%	0.01%
American Funds Capital World Gr&Inc R5	\$0	0.00%	\$0	0.00%	\$12,499,895	6.86%	\$15,016,706	7.47%	0.00%
American Funds Capital World Gr&Inc R6	\$9,969,425	4.98%	\$9,961,902	5.06%	\$0	0.00%	\$0	0.00%	-0.08%
VT III Vantagepoint Model Port Gbl Eq Gr	\$0	0.00%	\$0	0.00%	\$1,237,871	0.68%	\$1,389,814	0.69%	0.00%
Vanguard Target Retirement Income Inv	\$3,370,494	1.68%	\$3,324,480	1.69%	\$1,217,998	0.67%	\$1,602,752	0.80%	-0.01%
VT Retirement IncomeAdvantage	\$8,940,026	4.46%	\$8,723,248	4.43%	\$8,158,712	4.47%	\$8,575,203	4.27%	0.03%
Vanguard Target Retirement 2015 Inv	\$4,574,340	2.28%	\$4,610,799	2.34%	\$957,871	0.53%	\$1,000,277	0.50%	-0.06%
Vanguard Target Retirement 2020 Inv	\$9,773,764	4.88%	\$9,654,892	4.90%	\$2,391,168	1.31%	\$2,569,295	1.28%	-0.02%
Vanguard Target Retirement 2025 Inv	\$9,813,215	4.90%	\$9,706,981	4.93%	\$2,325,990	1.28%	\$2,514,677	1.25%	-0.03%
Vanguard Target Retirement 2030 Inv	\$6,151,819	3.07%	\$6,257,679	3.18%	\$2,786,081	1.53%	\$3,122,185	1.55%	-0.11%
Vanguard Target Retirement 2035 Inv	\$5,786,683	2.89%	\$5,482,204	2.78%	\$1,510,726	0.83%	\$1,600,404	0.80%	0.10%
Vanguard Target Retirement 2040 Inv	\$4,715,248	2.35%	\$4,726,751	2.40%	\$2,287,910	1.25%	\$2,466,902	1.23%	-0.05%
Vanguard Target Retirement 2045 Inv	\$3,217,105	1.61%	\$2,986,757	1.52%	\$1,529,147	0.84%	\$1,596,482	0.79%	0.09%
Vanguard Target Retirement 2050 Inv	\$1,390,927	0.69%	\$1,306,278	0.66%	\$513,703	0.28%	\$540,924	0.27%	0.03%
Vanguard Target Retirement 2055 Inv	\$56,832	0.03%	\$17,885	0.01%	\$0	0.00%	\$0	0.00%	0.02%
Vanguard Target Retirement 2060 Inv	\$22,934	0.01%	\$21,746	0.01%	\$0	0.00%	\$0	0.00%	0.00%
Vanguard Target Retirement 2065 Inv	\$29,164	0.01%	\$27,620	0.01%	\$0	0.00%	\$0	0.00%	0.00%
Self-Directed Brokerage	\$3,816,720	1.90%	\$3,152,902	1.60%	\$1,949,342	1.07%	\$2,236,998	1.11%	0.30%
Plan Totals:	\$200,376,970	100.00%	\$196,941,641	100.00%	\$182,333,102	100.00%	\$200,908,522	100.00%	0.00%



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
Cash	-	2018-12-31	-	-	-	-	-	-	-
Peer Group: Morningstar Money Market - Taxable Benchmark: FTSE Treasury Bill 3 Mon USD Peer Group Percentile Rank Notes:			1.70 2.30	0.61 0.84	0.42	:	14.95 -	23,939.95 -	-0.24 -
Vantagepoint PLUS Fund R10	-	2019-02-15	2.39	2.13	0.56	28.00	14.75	9,380.35	1.25
Peer Group: Morningstar US SA Stable Value			1.90	1.65	0.63	-	19.26	53.822.67	0.78
Benchmark: Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon)			3.14	1.04	-	-	-	-	-
Peer Group Percentile Rank Notes:			19	7	40		68		7
PIMCO Total Return A	ΡΤΤΑΧ	2009-03-26	7.27	2.64	0.89	32.00	4.75	65,684.21	-0.50
Peer Group: Morningstar Intermediate Core-Plus Bond			6.83	2.92	0.68	-	9.98	4,991.05	-0.14
Benchmark: BBgBarc US Universal TR USD			8.07	3.18	-	-	-	-	-
Peer Group Percentile Rank			61	66	70		74		75
Notes: The particular share class chosen for this fund was based on platfure revenue sharing amount, which may be credited back to participants criteria. The share class with the lowest prospectus net expense ratio	s. Due to thes	e reasons, we lool	k at the lowes	st net expens					

Fidelity® US Bond Index	FXNAX	2019-02-15	7.89	2.91	0.03	8.00	5.08	41,740.70	-0.11
Peer Group: Morningstar Intermediate Core Bond			6.77	2.62	0.56	-	10.38	9,224.46	-0.14
Benchmark: BBgBarc US Agg Bond TR USD			7.87	2.95	-	-	-	-	-
Peer Group Percentile Rank			23	23	4		70		46
Notes: This fund attempts to track the Bloomberg Barclays US Aggregate Bo	nd Index.								

Meets criteria Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
PIMCO Real Return Instl	PRRIX	2019-02-14	4.50	1.44	0.88	22.00	11.50	9,402.04	-0.37
Peer Group: Morningstar Inflation-Protected Bond Benchmark: BBgBarc Gbl Infl Linked US TIPS TR USD Peer Group Percentile Rank Notes: The particular share class chosen for this fund was based either on pla	atform availa	bility or taking into	3.59 4.84 37 consideration	1.21 1.76 34 the revenue	0.65 - 66 sharing amo	- - unt.	8.31 - 26	2,571.93 -	-0.37 - 51
PIMCO Income Instl	PIMIX	2019-02-15	6.87	5.30	0.74	12.00	12.25	124,611.95	4.26
Peer Group: Morningstar Multisector Bond Benchmark: BBgBarc Global Aggregate TR USD Peer Group Percentile Rank Notes:			5.33 5.85 34	2.85 1.20 1	0.95 - 32	-	8.12 - 18	4,209.18 -	1.86 - 1
Fidelity® Balanced	FBALX	2009-03-26	6.62	7.46	0.53	32.00	10.75	33,544.28	-1.48
Peer Group: Morningstar Allocation50% to 70% Equity Benchmark: Blend (60% S&P 500 TR_40% BC Agg Bond TR USD) Peer Group Percentile Rank Notes:			4.22 9.87 36	5.13 7.75 8	1.00 - 10	-	9.71 - 37	6,219.24 -	-2.58 - 21
JHancock Disciplined Value R6	JDVWX	2019-02-15	4.17	6.89	0.70	22.00	22.41	15,038.83	-0.89
Peer Group: Morningstar Large Value Benchmark: Russell 1000 Value TR USD Peer Group Percentile Rank Notes:			2.81 8.46 67	6.89 7.46 50	0.89 - 30	-	9.58 - 6	4,114.37 -	-0.50 - 61
Fidelity® 500 Index	FXAIX	2019-02-15	10.41	10.70	0.01	8.00	10.41	198,287.06	-0.01
Peer Group: Morningstar Large Blend Benchmark: S&P 500 TR USD Peer Group Percentile Rank Notes: This fund attempts to track the S&P 500 Index			5.72 10.42 27	9.04 10.71 11	0.81 - 2	-	8.90 - 34	11,319.36 -	-1.32 - 14

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
Fidelity® Contrafund®	FCNTX	2009-03-26	7.92	12.53	0.82	52.00	28.75	121,773.98	-0.29
Peer Group: Morningstar Large Growth Benchmark: Russell 1000 Growth TR USD Peer Group Percentile Rank Notes:			7.66 11.56 73	11.64 13.39 36	0.95 - 37	-	10.73 - 2	7,145.03 -	-1.45 - 28
MainStay Large Cap Growth I	MLAIX	2019-02-15	11.86	13.44	0.73	24.00	13.66	11,931.03	-0.46
Peer Group: Morningstar Large Growth Benchmark: Russell 1000 Growth TR USD Peer Group Percentile Rank Notes:			7.66 11.56 30	11.64 13.39 21	0.95 - 27	-	10.73 - 31	7,145.03 -	-1.45 - 31
Fidelity® Mid Cap Index	FSMDX	2019-02-15	7.88	8.64	0.03	7.00	7.75	10,321.11	0.02
Peer Group: Morningstar Mid-Cap Blend Benchmark: Russell Mid Cap TR USD Peer Group Percentile Rank Notes: This fund attempts to track the Russell Mid Cap Index.			-0.42 7.83 17	6.54 8.63 14	0.97 - 2	-	8.70 - 44	3,547.08 -	-1.86 - 16
JPMorgan Mid Cap Value R6	JMVYX	2019-02-15	4.63	7.18	0.73	21.00	21.58	17,031.27	0.70
Peer Group: Morningstar Mid-Cap Value Benchmark: Russell Mid Cap Value TR USD Peer Group Percentile Rank Notes:			-2.71 3.68 18	5.62 6.72 21	0.99 - 19	-	9.07 - 4	2,191.50	-1.27 - 17
T. Rowe Price Instl Mid-Cap Equity Gr	PMEGX	2019-02-15	16.66	13.56	0.61	22.00	22.91	7,975.00	2.73
Peer Group: Morningstar Mid-Cap Growth Benchmark: Russell Mid Cap Growth TR USD Peer Group Percentile Rank Notes:			5.71 13.94 14	10.08 11.10 8	1.06 - 7	-	10.64 - 4	2,683.62	-0.79 - 9

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
American Beacon Small Cap Value R6	AASRX	2019-02-15	-7.61	4.77	0.78	20.00	20.50	6,331.28	-0.64
Peer Group: Morningstar Small Value			-10.07	3.83	1.15	-	9.68	1,368.28	-1.40
Benchmark: Russell 2000 Value TR USD			-6.24	5.39	-	-	-	-	-
Peer Group Percentile Rank Notes:			56	33	12		10		39
Fidelity® Small Cap Index	FSSNX	2019-02-15	-3.21	7.28	0.03	7.00	7.75	9,398.63	0.20
Peer Group: Morningstar Small Blend			-6.05	5.93	1.07	-	8.98	1,547.35	-0.63
Benchmark: Russell 2000 TR USD			-3.31	7.06	-	-	-	-	-
Peer Group Percentile Rank Notes:			43	23	2		46		29
This fund attempts to track the Russell 2000 Index.									
AMG TimesSquare Small Cap Growth N	TSCPX	2014-03-14	8.34	10.34	1.11	19.00	19.41	1,036.74	2.32
Peer Group: Morningstar Small Growth			-1.89	9.25	1.15	-	10.41	1,487.08	1.22
Benchmark: Russell 2000 Growth TR USD			-0.49	8.63	-	-	-	-	-
Peer Group Percentile Rank Notes:			25	36	47		9		36
Oakmark International Advisor	ΟΑΥΙΧ	2019-02-15	-6.42	1.54	0.83	26.00	26.75	33,013.40	-0.65
Peer Group: Morningstar Foreign Large Value			-4.66	0.26	1.00	-	8.35	1,356.45	-1.87
Benchmark: MSCI EAFE NR USD			1.08	2.25	-	-	-	-	-
Peer Group Percentile Rank Notes:			92	14	32		1		14
Vanguard Total Intl Stock Index Admiral	VTIAX	2019-02-15	0.57	2.31	0.11	23.00	10.83	381,621.69	-0.34
Peer Group: Morningstar Foreign Large Blend			-2.03	2.07	0.93	-	7.25	6,572.69	-0.52
Benchmark: FTSE Global All Cap ex US TR USD			0.81	2.70	-	-	-	-	-
Peer Group Percentile Rank			42	35	5		23		38
Notes: This fund attempts to track the FTSE Global All Cap ex US Index.									



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
American Funds Europacific Growth R6	RERGX	2019-02-15	1.91	4.45	0.49	35.00	27.50	161,660.47	2.25
Peer Group: Morningstar Foreign Large Blend Benchmark: MSCI EAFE NR USD Peer Group Percentile Rank Notes:			-2.03 1.08 23	2.07 2.25 6	0.93 - 20	-	7.25 - 1	6,572.69 -	-0.10 - 6
Vanguard International Growth Adm	VWILX	2019-02-15	-0.40	6.78	0.32	37.00	16.33	37,113.45	1.94
Peer Group: Morningstar Foreign Large Growth Benchmark: MSCI EAFE Growth NR USD Peer Group Percentile Rank Notes:			-0.37 4.24 76	3.71 4.39 11	1.03 - 3	-	9.05 - 13	8,111.35 -	-0.52 - 15
Nuveen Real Estate Securities I	FARCX	2011-02-18	11.27	7.63	1.02	24.00	14.08	3,386.13	0.28
Peer Group: Morningstar Real Estate Benchmark: DJ US Select REIT TR USD Peer Group Percentile Rank Notes:			9.39 9.75 43	7.35 7.61 41	1.04 - 49	-	11.26 - 28	2,106.33 -	0.17 - 48
American Funds Capital World Gr&Inc R6	RWIGX	2019-02-14	3.46	6.03	0.44	26.00	26.25	97,362.06	0.22
Peer Group: Morningstar World Large Stock Benchmark: MSCI ACWI NR USD Peer Group Percentile Rank Notes:			2.14 5.74 64	5.79 6.16 45	1.03 - 4	-	7.05 - 2	4,372.59 -	-0.13 - 44
Vanguard Target Retirement Income Inv	VTINX	2012-11-16	6.54	4.18	0.12	15.00	6.33	16,765.21	0.37
Peer Group: Morningstar Target-Date Retirement Benchmark: S&P Target Date Retirement Income TR USD Peer Group Percentile Rank Notes:			5.38 5.90 30	3.50 3.94 19	0.68 - 4		8.12 - 65	556.86 -	-0.46 - 5

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
VT Retirement IncomeAdvantage	-	2018-12-31	5.40	4.48	1.59	-	-	-	-
Peer Group: Morningstar Target-Date Retirement Benchmark: S&P Target Date Retirement Income TR USD Peer Group Percentile Rank Notes:			5.38 5.90 74	3.50 3.94 11	0.68 - 97	-	8.12 -	556.86 -	-0.46 -
Vanguard Target Retirement 2015 Inv	ντχνχ	2012-11-16	6.48	4.89	0.13	15.00	6.33	15,774.55	0.37
Peer Group: Morningstar Target-Date 2015 Benchmark: S&P Target Date 2015 TR USD Peer Group Percentile Rank Notes:			5.35 5.77 36	4.37 4.77 29	0.65 - 5	-	6.49 - 41	1,172.91 -	-0.27 - 5
Vanguard Target Retirement 2020 Inv	VTWNX	2012-11-16	6.53	5.55	0.13	13.00	6.33	32,912.28	0.27
Peer Group: Morningstar Target-Date 2020 Benchmark: S&P Target Date 2020 TR USD Peer Group Percentile Rank Notes:			5.39 5.78 30	4.76 5.15 8	0.70 - 4	-	7.28 - 53	2,340.14 -	-0.23 - 10
Vanguard Target Retirement 2025 Inv	νττνχ	2012-11-16	6.61	5.94	0.13	15.00	6.33	43,560.48	0.30
Peer Group: Morningstar Target-Date 2025 Benchmark: S&P Target Date 2025 TR USD Peer Group Percentile Rank Notes:			5.27 5.70 28	5.13 5.52 6	0.68 - 4	-	6.95 - 53	2,971.60 -	-0.27 - 6
Vanguard Target Retirement 2030 Inv	VTHRX	2012-11-16	6.42	6.22	0.14	13.00	6.33	38,403.30	0.27
Peer Group: Morningstar Target-Date 2030 Benchmark: S&P Target Date 2030 TR USD Peer Group Percentile Rank Notes:			5.09 5.55 32	5.67 5.89 18	0.70 - 4	-	7.20 - 51	3,299.79 -	-0.30 - 10

Meets criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
Vanguard Target Retirement 2035 Inv	VTTHX	2012-11-16	6.27	6.49	0.14	15.00	6.33	36,493.03	0.20
Peer Group: Morningstar Target-Date 2035 Benchmark: S&P Target Date 2035 TR USD Peer Group Percentile Rank Notes:			4.97 5.36 31	5.88 6.23 19	0.69 - 4	-	6.88 - 52	2,605.43	-0.42 - 13
Vanguard Target Retirement 2040 Inv	VFORX	2012-11-16	6.00	6.72	0.14	13.00	6.33	28,469.79	0.06
Peer Group: Morningstar Target-Date 2040 Benchmark: S&P Target Date 2040 TR USD Peer Group Percentile Rank Notes:			4.64 5.26 33	6.14 6.47 22	0.74 - 4	-	7.21 - 51	2,432.02 -	-0.45 - 21
Vanguard Target Retirement 2045 Inv	ντινχ	2012-11-16	5.90	6.86	0.15	15.00	6.33	26,143.66	0.06
Peer Group: Morningstar Target-Date 2045 Benchmark: S&P Target Date 2045 TR USD Peer Group Percentile Rank Notes:			4.59 5.15 33	6.17 6.61 19	0.71 - 4	-	6.83 - 52	1,728.37 -	-0.54 - 18
Vanguard Target Retirement 2050 Inv	VFIFX	2012-11-16	5.86	6.85	0.15	13.00	6.33	18,853.19	0.09
Peer Group: Morningstar Target-Date 2050 Benchmark: S&P Target Date 2050 TR USD Peer Group Percentile Rank Notes:			4.41 5.03 37	6.32 6.73 24	0.74 - 4	-	6.86 - 51	1,398.50 -	-0.48 - 22
Vanguard Target Retirement 2055 Inv	VFFVX	2012-11-16	5.88	6.82	0.15	8.00	6.33	9,695.26	0.08
Peer Group: Morningstar Target-Date 2055 Benchmark: S&P Target Date 2055 TR USD Peer Group Percentile Rank Notes:			4.48 5.03 34	6.36 6.79 27	0.72 - 4	-	5.61 - 45	702.99 -	-0.54 - 21

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
Vanguard Target Retirement 2060 Inv	VTTSX	2012-11-16	5.86	6.81	0.15	7.00	6.33	4,078.65	0.07
Peer Group: Morningstar Target-Date 2060+			4.67	6.68	0.71	-	2.71	181.76	0.00
Benchmark: S&P Target Date 2055 TR USD			5.03	6.79	-	-	-	-	-
Peer Group Percentile Rank			41	42	5		1		42

Notes:

Benchmark comparison for Target Date 2060 Funds is the S&P 2055 Target. As of the date of this report the "S&P Target 2060" Index has not yet been assigned as the Morningstar Category from our pricing service. As such the most comparable benchmark has been included. When the S&P Target 2060 Index is available, the benchmark will be changed.

Vanguard Target Retirement 2065 Inv	VLXVX	2012-11-16	5.84	-	0.15	1.00	1.91	365.15	-
Peer Group: Morningstar Target-Date 2060+			4.67	6.68	0.71	-	2.71	181.76	0.00
Benchmark: S&P Target Date 2055 TR USD			5.03	6.79	-	-	-	-	-
Peer Group Percentile Rank			43		5		65		

Notes:

Benchmark comparison for Target Date 2065 Funds is the S&P 2055 Target. As of the date of this report the "S&P Target 2065" Index has not yet been assigned as the Morningstar Category from our pricing service. As such the most comparable benchmark has been included. When the S&P Target 2065 Index is available, the benchmark will be changed.

Meets criteria Does not meet criteria



				1 \	/ear	3 ነ	′ear	5 \	/ear	10	Year	Since	Inception
Investment Option	Ticker	QTD Return	YTD Return	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	Inception Date
Cash	-	-	-	-	-	-	-	-	-	-	-	-	-
Universe: Morningstar Money Market - Taxable		0.49	0.99	1.84	555	0.98	508	0.60	443	0.30	393		
Benchmark: FTSE Treasury Bill 3 Mon USD		0.61	1.21	2.30		1.36		0.84		0.46			
Vantagepoint PLUS Fund R10	-	0.61	1.21	2.39	19	2.21	10	2.13	7	2.17	35	3.56	01/02/199 [.]
Universe: Morningstar US SA Stable Value		0.67	1.35	2.30	206	1.78	186	1.64	156	1.96	98		
Benchmark: Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon)		1.04	1.84	3.14		1.34		1.04		0.84			
PIMCO Total Return A	ΡΤΤΑΧ	3.12	5.90	7.27	61	2.81	55	2.64	66	4.28	73	6.75	05/11/1987
Universe: Morningstar Intermediate Core-Plus Bond		2.93	6.40	7.35	623	2.95	539	2.84	453	4.82	332		
Benchmark: BBgBarc US Universal TR USD		3.11	6.54	8.07		2.84		3.18		4.37			
Fidelity® US Bond Index	FXNAX	2.97	6.01	7.89	23	2.20	47	2.91	23	3.82	51	5.93	05/04/201 ²
Universe: Morningstar Intermediate Core Bond		2.83	5.77	7.24	394	2.09	343	2.55	302	3.86	227		
Benchmark: BBgBarc US Agg Bond TR USD		3.08	6.11	7.87		2.31		2.95		3.90			
PIMCO Real Return Instl	PRRIX	2.70	6.33	4.50	37	2.36	18	1.44	34	3.96	5	5.67	01/29/1997
Universe: Morningstar Inflation-Protected Bond		2.51	5.80	4.12	223	1.92	193	1.22	165	3.14	101		
Benchmark: BBgBarc Gbl Infl Linked US TIPS TR USD		2.86	6.15	4.84		2.08		1.76		3.64			
PIMCO Income Insti	PIMIX	2.40	5.50	6.87	34	6.31	9	5.30	1	9.89	1	8.38	03/30/2007
Universe: Morningstar Multisector Bond		2.62	6.91	6.23	342	4.45	306	2.82	243	5.90	134		
Benchmark: BBgBarc Global Aggregate TR USD		3.29	5.57	5.85		1.62		1.20		2.89			
Fidelity® Balanced	FBALX	3.70	14.75	6.62	36	10.27	8	7.46	8	10.93	8	9.18	11/06/1986
Universe: Morningstar Allocation50% to 70% Equity		2.95	12.21	5.73	735	7.79	679	5.04	596	8.93	431		
Benchmark: Blend (60% S&P 500 TR_40% BC Agg Bond TR USD)		3.96	13.64	9.87		9.51		7.75		10.50			
JHancock Disciplined Value R6	JDVWX	2.96	12.54	4.17	67	11.09	30	6.89	50	12.70	38	8.33	01/02/1997
Universe: Morningstar Large Value		3.02	14.59	5.79	1236	10.12	1103	6.84	956	12.20	703		
Benchmark: Russell 1000 Value TR USD		3.84	16.24	8.46		10.19		7.46		13.19			
Fidelity® 500 Index	FXAIX	4.30	18.54	10.41	27	14.17	18	10.70	11	14.68	10	10.21	05/04/2011
Universe: Morningstar Large Blend		3.82	17.22	8.22	1408	12.51	1206	8.74	1067	13.24	812		
Benchmark: S&P 500 TR USD		4.30	18.54	10.42		14.19		10.71		14.70			

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				1 \	/ear	3 \	′ ear	5 Y	′ear	10	Year	Since	Inception
Investment Option	Ticker	QTD Return	YTD Return	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	Inception Date
Fidelity® Contrafund®	FCNTX	5.44	20.77	7.92	73	17.81	38	12.53	36	15.42	37	12.56	05/17/1967
Universe: Morningstar Large Growth		4.63	21.10	10.01	1383	16.92	1245	11.27	1110	14.67	822		
Benchmark: Russell 1000 Growth TR USD		4.64	21.49	11.56		18.07		13.39		16.28			
MainStay Large Cap Growth I	MLAIX	4.65	23.04	11.86	30	20.02	18	13.44	21	15.63	31	9.05	07/03/199
Universe: Morningstar Large Growth		4.63	21.10	10.01	1383	16.92	1245	11.27	1110	14.67	822		
Benchmark: Russell 1000 Growth TR USD		4.64	21.49	11.56		18.07		13.39		16.28			
Fidelity® Mid Cap Index	FSMDX	4.14	21.36	7.88	17	12.16	26	8.64	14	-	-	14.80	09/08/2011
Universe: Morningstar Mid-Cap Blend		3.04	17.52	2.41	437	9.98	362	6.04	312	12.87	228		
Benchmark: Russell Mid Cap TR USD		4.13	21.35	7.83		12.16		8.63		15.16			
JPMorgan Mid Cap Value R6	JMVYX	3.10	18.23	4.63	18	8.51	64	7.18	21	14.40	11	12.09	11/13/1997
Universe: Morningstar Mid-Cap Value		2.52	15.80	0.25	415	8.73	363	5.57	321	12.75	217		
Benchmark: Russell Mid Cap Value TR USD		3.19	18.02	3.68		8.95		6.72		14.56			
T. Rowe Price Instl Mid-Cap Equity Gr	PMEGX	7.26	25.41	16.66	14	17.52	30	13.56	8	17.68	3	12.54	07/31/199
Universe: Morningstar Mid-Cap Growth		5.61	24.97	9.88	602	15.59	539	9.78	484	14.53	367		
Benchmark: Russell Mid Cap Growth TR USD		5.40	26.08	13.94		16.49		11.10		16.02			
American Beacon Small Cap Value R6	AASRX	1.78	14.21	-7.61	56	8.62	36	4.77	33	13.05	21	9.89	12/31/199
Universe: Morningstar Small Value		0.63	12.92	-8.05	417	7.69	379	3.59	337	11.65	226		
Benchmark: Russell 2000 Value TR USD		1.37	13.47	-6.24		9.81		5.39		12.40			
Fidelity® Small Cap Index	FSSNX	2.13	17.00	-3.21	43	12.46	16	7.28	23	-	-	13.87	09/08/201 [,]
Universe: Morningstar Small Blend		2.21	15.74	-3.76	733	10.09	633	5.65	516	12.70	375		
Benchmark: Russell 2000 TR USD		2.10	16.98	-3.31		12.30		7.06		13.45			
AMG TimesSquare Small Cap Growth N	TSCPX	4.35	25.63	8.34	25	16.15	47	10.34	36	15.25	36	9.56	01/21/2000
Universe: Morningstar Small Growth		4.12	21.82	3.22	672	16.03	585	9.17	516	14.46	395		
Benchmark: Russell 2000 Growth TR USD		2.75	20.36	-0.49		14.69		8.63		14.41			
Oakmark International Advisor	OAYIX	3.36	12.78	-6.42	92	10.64	3	1.54	14	9.07	4	7.42	09/30/1992
Universe: Morningstar Foreign Large Value		1.71	10.51	-2.01	339	6.84	297	0.08	238	5.67	161		
Benchmark: MSCI EAFE NR USD		3.68	14.03	1.08		9.11		2.25		6.90			



				1)	/ear	3 \	/ear	5 Y	′ear	10	Year	Since	Inception
Investment Option	Ticker	QTD Return	YTD Return	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	Inception Date
Vanguard Total Intl Stock Index Admiral	VTIAX	2.75	13.27	0.57	42	8.94	30	2.31	35	6.59	50	4.68	04/29/1990
Universe: Morningstar Foreign Large Blend		2.98	13.58	-0.05	722	8.13	611	2.03	488	6.44	366		
Benchmark: FTSE Global All Cap ex US TR USD		2.99	13.58	0.81		9.51		2.70		7.26			
American Funds Europacific Growth R6	RERGX	3.87	17.59	1.91	23	10.84	4	4.45	6	8.15	7	10.63	04/16/198
Universe: Morningstar Foreign Large Blend		2.98	13.58	-0.05	722	8.13	611	2.03	488	6.44	366		
Benchmark: MSCI EAFE NR USD		3.68	14.03	1.08		9.11		2.25		6.90			
Vanguard International Growth Adm	VWILX	3.23	18.63	-0.40	76	15.36	4	6.78	11	10.10	11	10.53	09/30/198 ⁻
Universe: Morningstar Foreign Large Growth		4.81	18.29	2.25	465	9.63	396	4.09	336	8.18	250		
Benchmark: MSCI EAFE Growth NR USD		5.73	18.47	4.24		9.68		4.39		8.23			
Nuveen Real Estate Securities I	FARCX	1.51	18.34	11.27	43	4.17	51	7.63	41	15.33	30	11.44	06/30/199
Universe: Morningstar Real Estate		1.93	18.33	10.45	259	4.66	226	7.23	198	14.53	139		
Benchmark: DJ US Select REIT TR USD		0.82	16.67	9.75		3.73		7.61		15.40			
American Funds Capital World Gr&Inc R6	RWIGX	3.00	15.62	3.46	64	10.97	47	6.03	45	10.23	50	10.46	03/26/199
Universe: Morningstar World Large Stock		3.54	16.47	4.90	864	11.05	725	5.96	597	10.25	355		
Benchmark: MSCI ACWI NR USD		3.61	16.23	5.74		11.62		6.16		10.15			
Vanguard Target Retirement Income Inv	VTINX	2.97	8.63	6.54	30	5.24	42	4.18	19	6.36	35	5.25	10/27/200
Universe: Morningstar Target-Date Retirement		2.72	8.63	5.89	184	5.02	159	3.48	127	5.96	93		
Benchmark: S&P Target Date Retirement Income TR USD		2.82	8.55	5.90		5.02		3.94		6.03			
VT Retirement IncomeAdvantage	-	3.01	11.77	5.40	74	6.94	2	4.48	11	6.94	16	-	-
Universe: Morningstar Target-Date Retirement		2.72	8.63	5.89	184	5.02	159	3.48	127	5.96	93		
Benchmark: S&P Target Date Retirement Income TR USD		2.82	8.55	5.90		5.02		3.94		6.03			
Vanguard Target Retirement 2015 Inv	ντχνχ	3.05	9.74	6.48	36	6.66	43	4.89	29	8.33	23	6.10	10/27/200
Universe: Morningstar Target-Date 2015		2.95	10.03	5.99	135	6.45	109	4.32	79	7.72	54		
Benchmark: S&P Target Date 2015 TR USD		2.79	9.87	5.77		6.54		4.77		7.89			
Vanguard Target Retirement 2020 Inv	VTWNX	3.24	11.32	6.53	30	7.82	22	5.55	8	9.15	13	6.20	06/07/200
Universe: Morningstar Target-Date 2020		3.02	10.67	5.96	245	6.89	204	4.52	163	8.08	101		
Benchmark: S&P Target Date 2020 TR USD		2.88	10.54	5.78		7.28		5.15		8.66			



				1 \	/ear	3 \	r ear	5 ۲	′ear	10	Year	Since	Inception
Investment Option	Ticker	QTD Return	YTD Return	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	Inception Date
Vanguard Target Retirement 2025 Inv	VTTVX	3.35	12.46	6.61	28	8.69	26	5.94	6	9.79	16	6.72	10/27/2003
Universe: Morningstar Target-Date 2025		3.16	11.87	5.99	228	7.93	186	5.00	149	8.96	80		
Benchmark: S&P Target Date 2025 TR USD		2.99	11.61	5.70		8.09		5.52		9.33			
Vanguard Target Retirement 2030 Inv	VTHRX	3.41	13.27	6.42	32	9.39	34	6.22	18	10.35	18	6.52	06/07/2006
Universe: Morningstar Target-Date 2030		3.24	12.98	5.86	234	8.75	194	5.44	153	9.42	91		
Benchmark: S&P Target Date 2030 TR USD		3.09	12.78	5.55		8.82		5.89		9.91			
Vanguard Target Retirement 2035 Inv	VTTHX	3.47	14.03	6.27	31	10.11	34	6.49	19	10.88	13	7.31	10/27/2003
Universe: Morningstar Target-Date 2035		3.31	14.02	5.71	223	9.66	181	5.80	144	10.07	75		
Benchmark: S&P Target Date 2035 TR USD		3.18	13.78	5.36		9.50		6.23		10.39			
Vanguard Target Retirement 2040 Inv	VFORX	3.46	14.79	6.00	33	10.79	27	6.72	22	11.17	15	6.95	06/07/2006
Universe: Morningstar Target-Date 2040		3.32	14.69	5.48	233	10.04	193	6.01	152	10.21	91		
Benchmark: S&P Target Date 2040 TR USD		3.27	14.45	5.26		10.00		6.47		10.73			
Vanguard Target Retirement 2045 Inv	ντινχ	3.51	15.39	5.90	33	11.05	28	6.86	19	11.24	13	7.72	10/27/2003
Universe: Morningstar Target-Date 2045		3.38	15.29	5.42	223	10.51	181	6.17	144	10.54	74		
Benchmark: S&P Target Date 2045 TR USD		3.32	14.78	5.15		10.32		6.61		10.94			
Vanguard Target Retirement 2050 Inv	VFIFX	3.47	15.38	5.86	37	11.03	33	6.85	24	11.23	15	7.00	06/07/2006
Universe: Morningstar Target-Date 2050		3.37	15.44	5.31	233	10.47	193	6.22	152	10.48	73		
Benchmark: S&P Target Date 2050 TR USD		3.32	14.97	5.03		10.61		6.73		11.10			
Vanguard Target Retirement 2055 Inv	VFFVX	3.48	15.38	5.88	34	11.04	40	6.82	27	-	-	10.80	08/18/2010
Universe: Morningstar Target-Date 2055		3.40	15.60	5.30	224	10.71	180	6.29	137	10.74	13		
Benchmark: S&P Target Date 2055 TR USD		3.34	15.02	5.03		10.80		6.79		11.24			
Vanguard Target Retirement 2060 Inv	VTTSX	3.48	15.36	5.86	41	11.03	49	6.81	42	-	-	9.98	01/19/2012
Universe: Morningstar Target-Date 2060+		3.47	15.82	5.44	207	10.88	119	6.47	15	-	0		
Benchmark: S&P Target Date 2055 TR USD		3.34	15.02	5.03		10.80		6.79		11.24			
Vanguard Target Retirement 2065 Inv	VLXVX	3.52	15.40	5.84	43	-	-	-	-	-	-	7.29	07/12/2017
Universe: Morningstar Target-Date 2060+		3.47	15.82	5.44	207	10.88	119	6.47	15	-	0		
Benchmark: S&P Target Date 2055 TR USD		3.34	15.02	5.03		10.80		6.79		11.24			



Lansing Board of Water & Light 401(a) Plans Cash

Ticker: Peer Group/Category: Benchmark: FTSE Trea Fund Inception Date: -	asury Bill 3 Mon U		N	und Man Ianager T Vebsite: -	enure: -			Total Fund Assets: - Net Expense Ratio: - Fund Family: -	Criteria	Pass Criteria
	Last Quarter	Year to Date	1 Year	3 Year	5 Year	10 Year	Since Inception	Net Expense Ratio	Return 1Yr Return 5Yr	NE
Fund Benchmark Peers #Funds Rank%	- 0.61 0.49 566	- 1.21 0.99 564	- 2.30 1.84 555		0.84 0.60 443	0.46 0.30 393	-	0 Fund AvgPeer	Expense Ratio Prod Hist Manager Tenure AUM Alpha 5Yr	NE NE NE NE NE
Returns for Periods I		9						or Calendar Years It data to display graph		

Cash FTSE Treasury Bill 3 Mon USD



Lansing Board of Water & Light 401(a) Plans Cash

Portfolio Analysis	Fund	Peer Group	Returns for 12 Quarter Rolling Periods
verage Effective Duration verage Effective Maturity umber of Holdings	- - -	- - 76	Insufficient data to display graph
Statistics Relative to FTSE Treasury E	Bill 3 Mon USD for 5 Years		Alpha Relative to FTSE Treasury Bill 3 Mon USD for 12 Quarter Rolling Periods
Insufficient data to display graph			Insufficient data to display graph
Insufficient data to display graph Risk Measures 5 Yr	Fund	Peer Group	Insufficient data to display graph
Risk Measures 5 Yr	Fund	Peer Group -0.24	Insufficient data to display graph
Risk Measures 5 Yr Alpha			Insufficient data to display graph
Risk Measures 5 Yr Alpha Beta	-	-0.24	Insufficient data to display graph
Risk Measures 5 Yr Alpha Beta Sharpe Ratio	-	-0.24 1.05	Insufficient data to display graph
		-0.24 1.05 -3.53	Insufficient data to display graph



Lansing Board of Water & Light 401(a) Plans Vantagepoint PLUS Fund R10

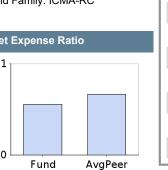
Ticker:

Peer Group/Category: Morningstar US SA Stable Value Benchmark: Blend (50% BofAML US Treasuries 1-3 Yr TR_50% Manager Tenure: 14.75 Years BofAML US Treasury Bill 3 Mon) Fund Inception Date: 01-02-1991

Fund Manager: Wayne Wicker Website: -

Total Fund Assets: \$9.38 bn Net Expense Ratio: 0.56 Fund Family: ICMA-RC

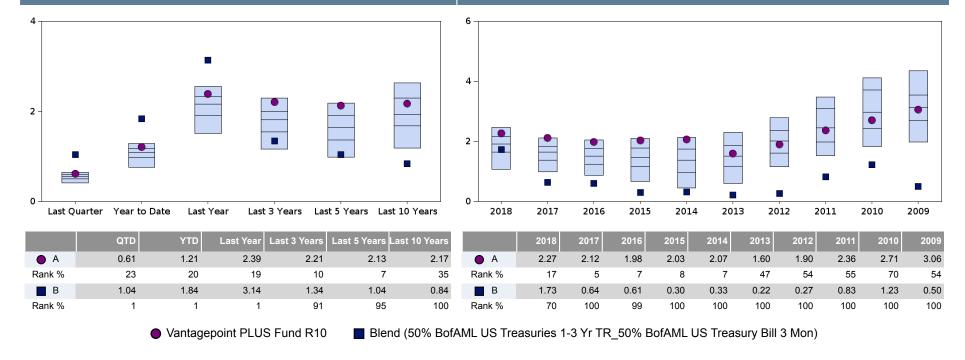
	Last Quarter	Year to Date	1 Year	3 Year	5 Year	10 Year	Since Inception	Net Expense Ratio
Fund	0.61	1.21	2.39	2.21	2.13	2.17	3.56	1.
Benchmark	1.04	1.84	3.14	1.34	1.04	0.84		1
Peers	0.67	1.35	2.30	1.78	1.64	1.96		
#Funds	215	215	206	186	156	98		
Rank%	23	20	19	10	7	35		



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

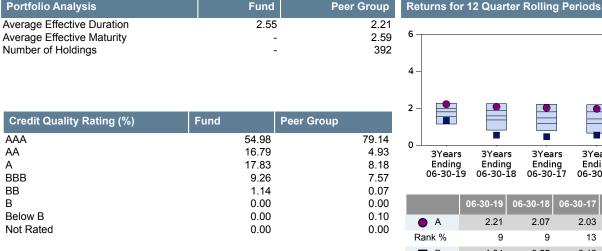
Returns for Periods Ending 06/30/2019

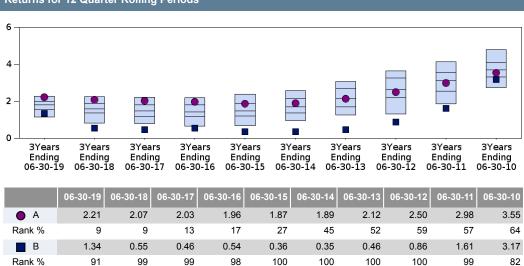
Returns for Calendar Years



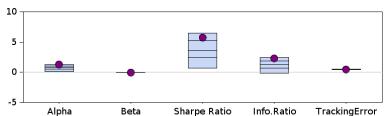


Lansing Board of Water & Light 401(a) Plans Vantagepoint PLUS Fund R10





Statistics Relative to Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon) for 5 Years

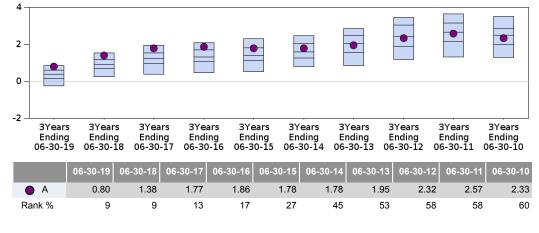


Risk Measures 5 Yr	Fund	Peer Group
Alpha	1.25	0.77
Beta	-0.05	-0.05
Sharpe Ratio	5.73	3.76
Information Ratio	2.29	1.26
RSquared	0.85	1.36
TrackingError	0.48	0.47

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Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon)



Lansing Board of Water & Light 401(a) Plans **PIMCO** Total Return A

Ticker: PTTAX

Peer Group/Category: Morningstar Intermediate Core-Plus Fund Manager: Scott Mather Bond Benchmark: BBgBarc US Universal TR USD Fund Inception Date: 05-11-1987

Manager Tenure: 4.75 Years Website: www.pimco.com

Total Fund Assets: \$65.68 bn Net Expense Ratio: 0.89 Fund Family: PIMCO

PTTAX

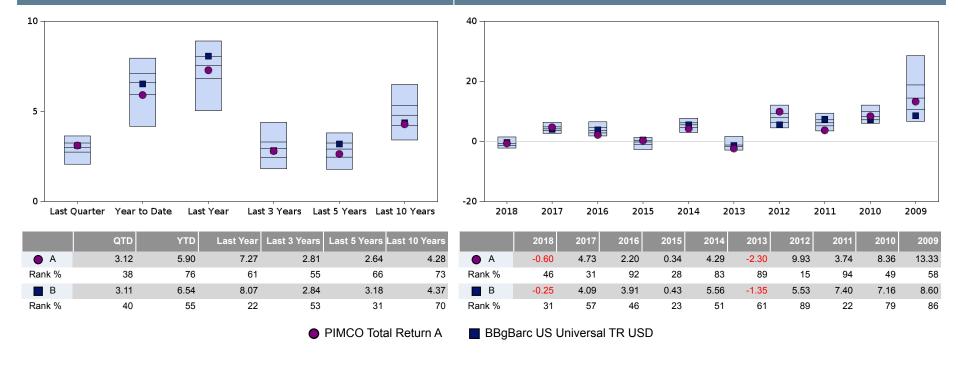
AvgPeer

	Last Quarter	Year to Date	1 Year	3 Year	5 Year	10 Year	Since Inception	Net Expense Ratio	
Fund	3.12	5.90	7.27	2.81	2.64	4.28	6.55	1.	
Benchmark	3.11	6.54	8.07	2.84	3.18	4.37			
Peers	2.93	6.40	7.35	2.95	2.84	4.82			_
#Funds	645	643	623	539	453	332			
Rank%	38	76	61	55	66	73			

Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	No
Expense Ratio	No
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	No

Returns for Periods Ending 06/30/2019

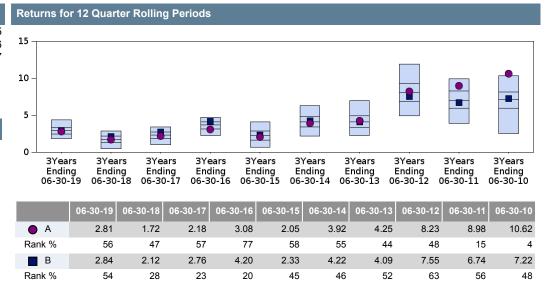
Returns for Calendar Years



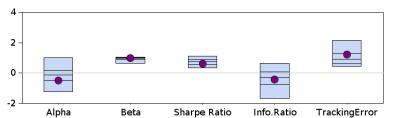


Lansing Board of Water & Light 401(a) Plans PIMCO Total Return A

Portfolio Analysis	Fund	Peer Group
Average Effective Duration	3.78	5.25
Average Effective Maturity	4.92	8.06
Number of Holdings	7539	917
Credit Quality Rating (%)	Fund	Peer Group
AAA	66.00	48.42
AA	4.00	6.49
A	12.00	12.57
BBB	8.00	20.31
BB	5.00	5.31
В	3.00	2.91
Below B	2.00	1.21
Not Rated	-	2.77

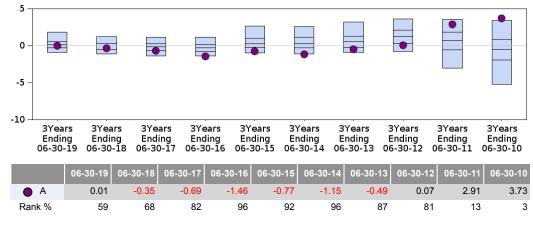


Statistics Relative to BBgBarc US Universal TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.50	-0.12
Beta	0.99	0.91
Sharpe Ratio	0.60	0.73
Information Ratio	-0.44	-0.40
RSquared	83.06	84.36
TrackingError	1.23	1.07





PIMCO Total Return A

BBgBarc US Universal TR USD



Lansing Board of Water & Light 401(a) Plans Fidelity® US Bond Index

Ticker: FXNAX

Fund

Peers #Funds

Rank%

Ο Α

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Intermediate Core Bond Fund Manager: Brandon Bettencourt Benchmark: BBgBarc US Agg Bond TR USD Fund Inception Date: 05-04-2011

Last Quarter

2.97

3.08

2.83

408

49

Manager Tenure: 5.08 Years Website: www.institutional.fidelity.com

5 Year

2.91

2.95

2.55

302

23

3.82

3.90

3.86

227

51

3 Year

2.20

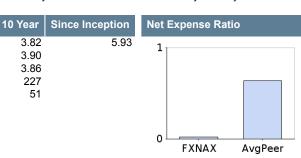
2.31

2.09

343

47

Total Fund Assets: \$41.74 bn Net Expense Ratio: 0.02 Fund Family: Fidelity Investments



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes
AUM	Yes

Poturne	for	Dariada	Ending	06/30/2019
Returns	101	renous	Enung	00/30/2019

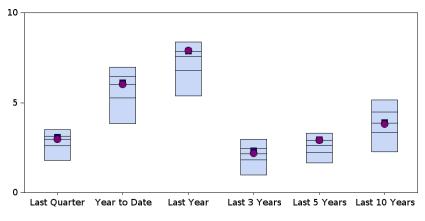
QTD

2.97

49

32

3.08



Last Year

7.89

7.87

23

25

Last 3 Years

2.20

2.31

47

35

Year to Date

6.01

6.11

5.77

403

52

1 Year

7.89

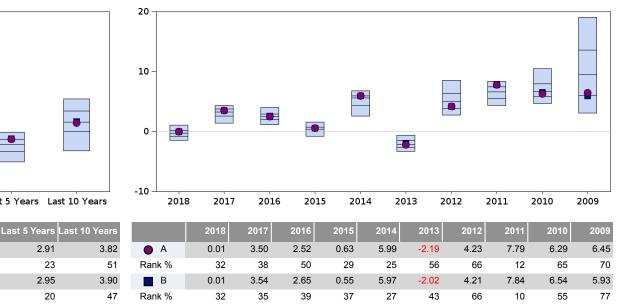
7.87

7.24

394

23

Returns for Calendar Years



Fidelity® US Bond Index

2.91

23

20

2.95

BBgBarc US Agg Bond TR USD

YTD

6.01

52

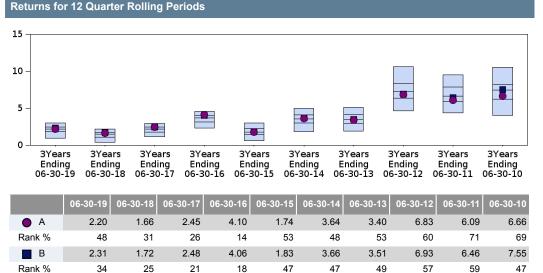
43

6.11

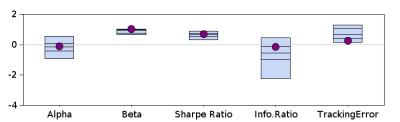


Lansing Board of Water & Light 401(a) Plans Fidelity® US Bond Index

Portfolio Analysis	Fund	Peer Group
Average Effective Duration	5.73	5.41
Average Effective Maturity		- 8.49
Number of Holdings	1977	1356
Credit Quality Rating (%)	Fund	Peer Group
Credit Quality Rating (%) AAA	Fund 74.96	Peer Group 63.74
		•
ААА	74.96	63.74
AAA AA	74.96 4.44	63.74 5.60
AAA AA A	74.96 4.44 11.16	63.74 5.60 11.71
AAA AA A BBB	74.96 4.44 11.16 9.30	63.74 5.60 11.71 15.81
AAA AA A BBB BB	74.96 4.44 11.16 9.30 0.04	63.74 5.60 11.71 15.81 0.95
AAA AA A BBB BB BB B	74.96 4.44 11.16 9.30 0.04 0.00	63.74 5.60 11.71 15.81 0.95 0.22

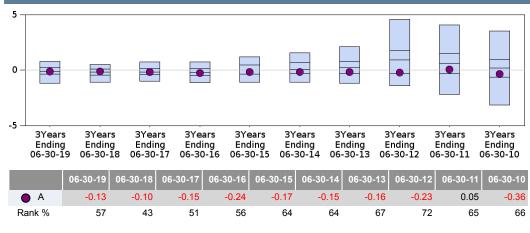


Statistics Relative to BBgBarc US Agg Bond TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.11	-0.17
Beta	1.04	0.89
Sharpe Ratio	0.68	0.64
Information Ratio	-0.16	-0.69
RSquared	99.45	93.39
TrackingError	0.25	0.74

Alpha Relative to BBgBarc US Agg Bond TR USD for 12 Quarter Rolling Periods



Fidelity® US Bond Index

BBgBarc US Agg Bond TR USD



Lansing Board of Water & Light 401(a) Plans **PIMCO Real Return Instl**

Ticker: PRRIX

Fund

Peers #Funds

Rank%

Ο Α

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Inflation-Protected Bond Benchmark: BBgBarc Gbl Infl Linked US TIPS TR USD Fund Inception Date: 01-29-1997

Last Quarter

2.70

2.86

2.51

226

40

Fund Manager: Mihir Worah Manager Tenure: 11.50 Years Website: www.pimco.com

5 Year

1.44

1.76

1.22

165

34

10 Year

3.96

3.64

3.14

101

5

3 Year

2.36

2.08

1.92

193

18

Total Fund Assets: \$9.40 bn Net Expense Ratio: 0.88 Fund Family: PIMCO



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	No
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	No

Returns for Periods Ending 06/30/2019

QTD

2.70

2.86

40

20

15 10 5 0 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years

Last Year

4.50

37

4.84

17

Year to Date

6.33

6.15

5.80

226

22

1 Year

4.50

4.84

4.12

223

37

Returns for Calendar Years



PIMCO Real Return Instl

1.44

34

1.76

10

Last 3 Years

2.36

18

29

2.08

BBgBarc Gbl Infl Linked US TIPS TR USD

YTD

6.33

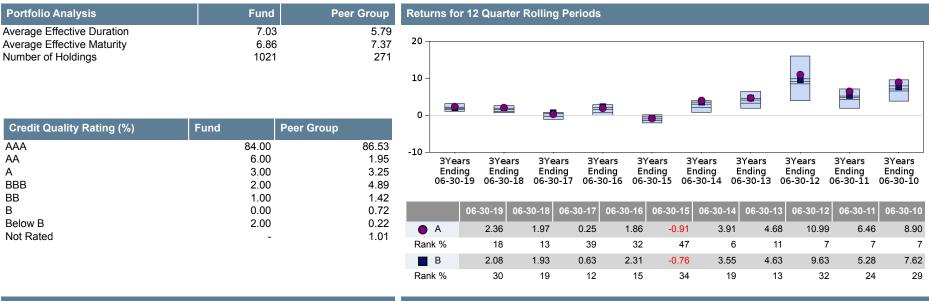
22

41

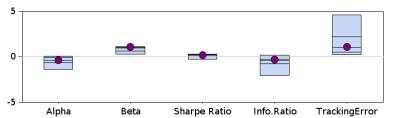
6.15



Lansing Board of Water & Light 401(a) Plans PIMCO Real Return Instl

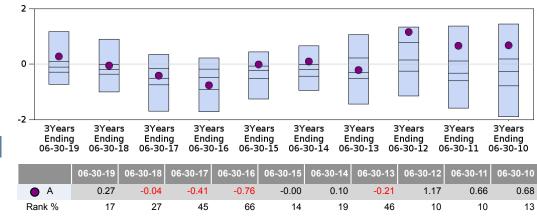


Statistics Relative to BBgBarc Gbl Infl Linked US TIPS TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.37	-0.43
Beta	1.09	0.90
Sharpe Ratio	0.16	0.10
Information Ratio	-0.29	-0.64
RSquared	92.98	83.81
TrackingError	1.08	1.56

Alpha Relative to BBgBarc Gbl Infl Linked US TIPS TR USD for 12 Quarter Rolling Periods



PIMCO Real Return Instl

BBgBarc Gbl Infl Linked US TIPS TR USD



Lansing Board of Water & Light 401(a) Plans PIMCO Income Instl

Ticker: PIMIX

Fund

Peers #Funds

Rank%

Ο Α

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Multisector Bond Benchmark: BBgBarc Global Aggregate TR USD Fund Inception Date: 03-30-2007

Last Quarter

2.40

3.29

2.62

363

64

Fund Manager: Daniel Ivascyn Manager Tenure: 12.25 Years Website: www.pimco.com

3 Year

6.31

1.62

4.45

306

9

5 Year

5.30

1.20

2.82

243

1

10 Year

9.89

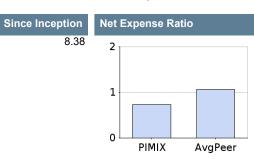
2.89

5.90

134

1

Total Fund Assets: \$124.61 bn Net Expense Ratio: 0.74 Fund Family: PIMCO



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

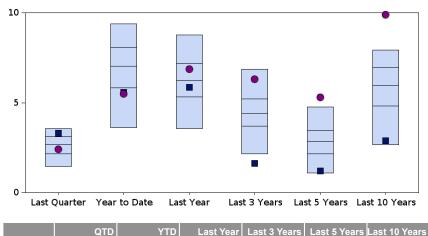
Returns for Periods Ending 06/30/2019

2.40

64

3.29

14



6.87

34

65

5.85

6.31

1.62

97

9

Year to Date

5.50

5.57

6.91

354

83

1 Year

6.87

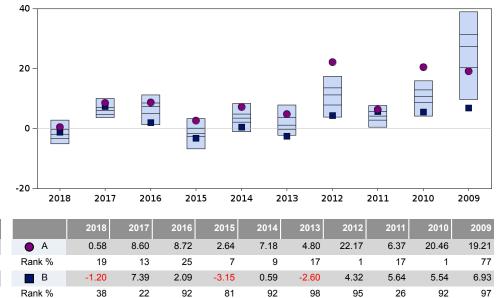
5.85

6.23

342

34

Returns for Calendar Years



PIMCO Income Instl

5.30

1.20

94

1

9.89

2.89

93

1

BBgBarc Global Aggregate TR USD

5.50

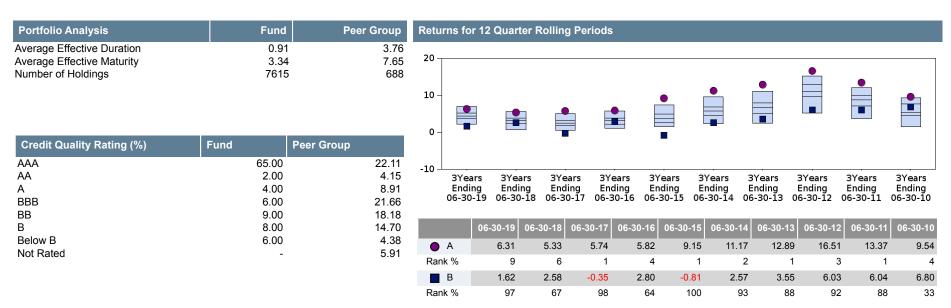
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83

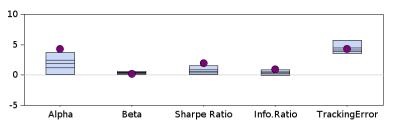
79



Lansing Board of Water & Light 401(a) Plans PIMCO Income Instl

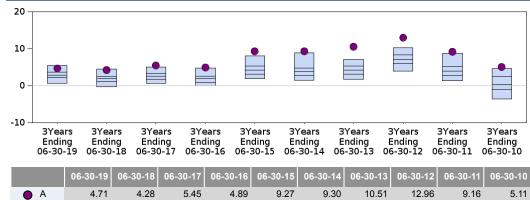


Statistics Relative to BBgBarc Global Aggregate TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	4.26	1.82
Beta	0.17	0.37
Sharpe Ratio	1.94	0.64
Information Ratio	0.95	0.39
RSquared	11.98	24.71
TrackingError	4.31	4.31

Alpha Relative to BBgBarc Global Aggregate TR USD for 12 Quarter Rolling Periods



4

1

3

3

1

2

2

PIMCO Income Instl

BBgBarc Global Aggregate TR USD

6

1

9

Rank %



Lansing Board of Water & Light 401(a) Plans Fidelity® Balanced

Ticker: FBALX

Peer Group/Category: Morningstar Allocation -- 50% to 70% Fund Manager: Steven Kaye Manager Tenure: 10.75 Years Equity Benchmark: Blend (60% S&P 500 TR 40% BC Agg Bond TR Website: www.institutional.fidelity.com USD)

Total Fund Assets: \$33.54 bn Net Expense Ratio: 0.53 Fund Family: Fidelity Investments

FBALX

AvgPeer

Fund Inception Date: 11-06-1986

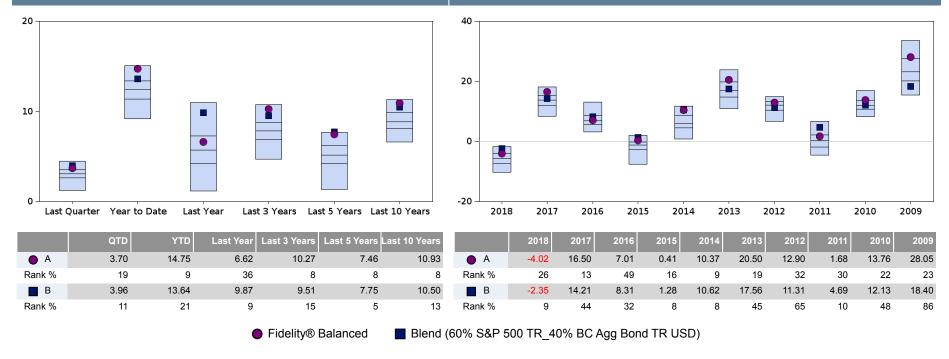
	Last Quarter	Year to Date	1 Year	3 Year	5 Year	10 Year	Since Inception	Net Ex	xpense Ratio
Fund	3.70	14.75	6.62	10.27	7.46	10.93	9.18	2	
Benchmark	3.96	13.64	9.87	9.51	7.75	10.50		2	
Peers	2.95	12.21	5.73	7.79	5.04	8.93			
#Funds	746	741	735	679	596	431			
Rank%	19	9	36	8	8	8		1	

Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

Returns for Calendar Years

0

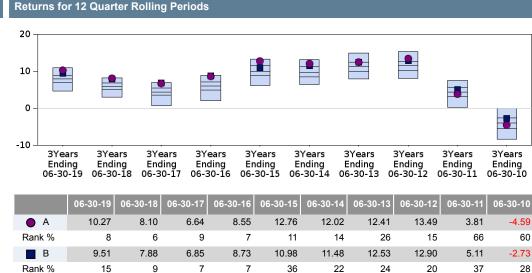


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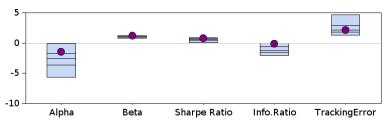


Lansing Board of Water & Light 401(a) Plans Fidelity® Balanced

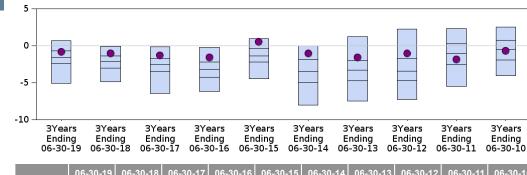
Portfolio Analysis	Fund	Peer Group	R
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	62,621.52 17.91 1730.00	17.66	2
	1100.00	011.00	1
Sector Weightings (%)	Fund	Peer Group	
Technology	26.61	18.22	
Communication Services	3.53	3.46	
Consumer Cyclical	11.30	11.25	-1
Consumer Defensive	7.29	7.52	
Industrials	8.38	10.76	
Basic Materials	2.63	3.88	
Financial Services	14.40	16.62	
Real Estate	2.19	5.09	
Healthcare	15.32	12.69	
Energy	5.22	7.04	
Utilities	3.15	3.47	



Statistics Relative to Blend (60% S&P 500 TR_40% BC Agg Bond TR USD) for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-1.48	-2.81
Beta	1.19	1.04
Sharpe Ratio	0.77	0.56
Information Ratio	-0.13	-1.07
RSquared	96.47	89.46
TrackingError	2.16	2.63



Alpha Relative to Blend (60% S&P 500 TR_40% BC Agg Bond TR USD) for 12 Quarter Rolling Periods

	06-30-19	06-30-18	06-30-17	06-30-16	06-30-15	06-30-14	06-30-13	06-30-12	06-30-11	06-30-10
Ο Α	-0.83	-1.03	-1.28	-1.59	0.52	-1.06	-1.56	-1.06	-1.87	-0.67
Rank %	29	17	16	17	11	17	22	16	66	53

Fidelity® Balanced

Blend (60% S&P 500 TR_40% BC Agg Bond TR USD)

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Ticker: JDVWX

-10

Lansing Board of Water & Light 401(a) Plans JHancock Disciplined Value R6

Total Fund Assets: \$15.04 bn Peer Group/Category: Morningstar Large Value Fund Manager: Mark Donovan Pass Benchmark: Russell 1000 Value TR USD Manager Tenure: 22.41 Years Net Expense Ratio: 0.70 Criteria Criteria Fund Inception Date: 01-02-1997 Website: www.jhfunds.com Fund Family: John Hancock Return 1Yr Yes Last Quarter Year to Date 3 Year 5 Year 10 Year Since Inception Net Expense Ratio 1 Year Return 5Yr Yes Fund 2.96 12.54 4.17 11.09 6.89 12.70 8.33 2 Expense Ratio Yes 3.84 16.24 8.46 10.19 7.46 13.19 Benchmark 3.02 12.20 Peers 14.59 5.79 10.12 6.84 Prod Hist Yes #Funds 1258 1249 1236 1103 956 703 59 85 30 50 38 1 Rank% 67 Manager Tenure Yes AUM Yes Ω Alpha 5Yr No JDVWX AvgPeer **Returns for Calendar Years** Returns for Periods Ending 06/30/2019 20 50 -10 8 --0-0 --0

-50

A

Rank %

В

Rank %

2018

Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years

	QTD	YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Ο Α	2.96	12.54	4.17	11.09	6.89	12.70
Rank %	59	85	67	30	50	38
В	3.84	16.24	8.46	10.19	7.46	13.19
Rank %	34	27	31	54	38	25

• JHancock Disciplined Value R6

Russell 1000 Value TR USD

2016

2017

19.33

13.66

17

78

2015

2016

14.07

17.34

62

27

2014

2015

-4.81

72

60

-3.83

2013

11.04

13.45

55

17

2013

35.97

32.53

18

43

2012

2012

20.08

17.51

6

19

2011

2011

0.32

49

48

0.39

2010

2010

13.12

15.51

64

32

2009

2009

26.26

19.69

39

69

2017

2018

-9.47

63

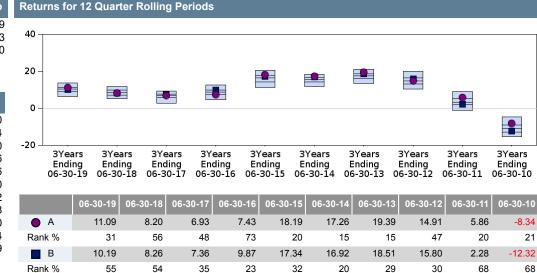
44

-8.27

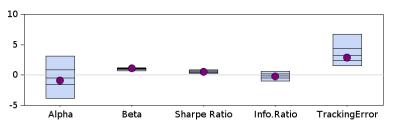


Lansing Board of Water & Light 401(a) Plans JHancock Disciplined Value R6

Portfolio Analysis	Fund	d Peer Group	F
Geo Avg Market Cap \$MM	86,209.9	2 62,949.29	
Price/Earning Ratio	17.6	8 15.73	
Number of Holdings	85.0	0 123.00	
Sector Weightings (%)	Fund	Peer Group	
Technology	11.20	11.80	
Communication Services	7.31	4.74	
Consumer Cyclical	6.15	8.80	-
Consumer Defensive	5.50	9.26	
Industrials	11.19	9.96	
Basic Materials	5.47	3.10	
Financial Services	24.46	21.02	Т
Real Estate	2.14	3.38	
Healthcare	16.21	13.60	
Energy	9.69	9.04	
Utilities	0.68	5.29	

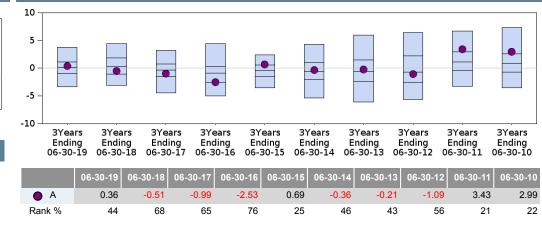


Statistics Relative to Russell 1000 Value TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.89	-0.43
Beta	1.07	0.98
Sharpe Ratio	0.51	0.54
Information Ratio	-0.20	-0.19
RSquared	95.55	90.87
TrackingError	2.87	3.64

Alpha Relative to Russell 1000 Value TR USD for 12 Quarter Rolling Periods



JHancock Disciplined Value R6

Russell 1000 Value TR USD



Lansing Board of Water & Light 401(a) Plans Fidelity® 500 Index

Ticker: FXAIX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Large Blend Benchmark: S&P 500 TR USD Fund Inception Date: 05-04-2011

Last Quarter

4.30

4.30

3.82

1463

34

Year to Date

18.54

18.54

17.22

1447

33

Fund Manager: Louis Bottari Manager Tenure: 10.41 Years Website: www.institutional.fidelity.com

5 Year

10.70

10.71

8.74

1067

11

14.68

14.70

13.24

812

10

3 Year

14.17

14.19

12.51

1206

18

1 Year

10.41

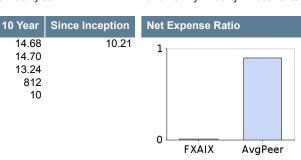
10.42

8.22

27

1408

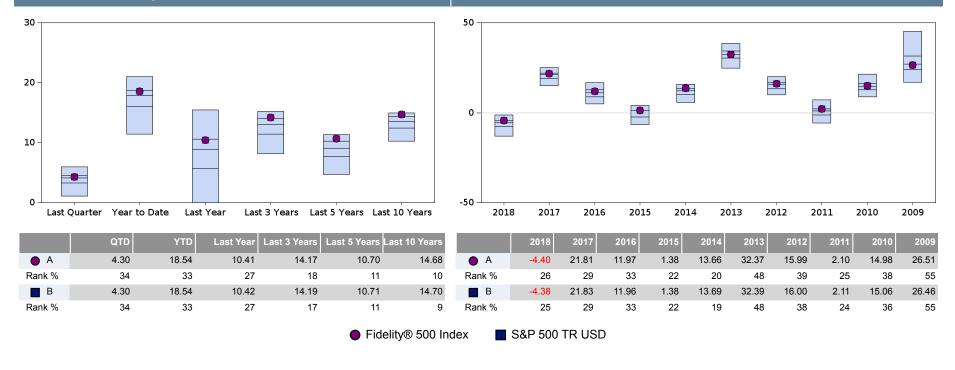
Total Fund Assets: \$198.29 bn Net Expense Ratio: 0.02 Fund Family: Fidelity Investments



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

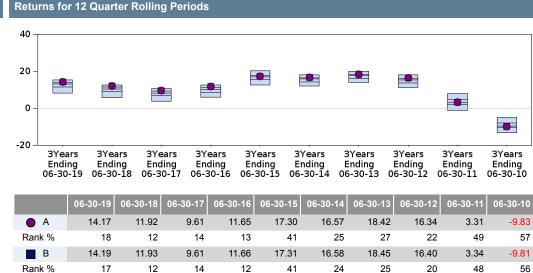
Returns for Calendar Years



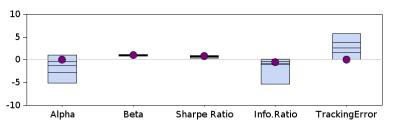


Lansing Board of Water & Light 401(a) Plans Fidelity® 500 Index

Portfolio Analysis	Fund	Peer Group	F
Geo Avg Market Cap \$MM	102,828.59	77,488.46	
Price/Earning Ratio	18.85	5 18.84	
Number of Holdings	509.00) 287.00	
Sector Weightings (%)	Fund	Peer Group	
Technology	22.71	20.87	
Communication Services	3.53	3.37	
Consumer Cyclical	12.12	12.12	-
Consumer Defensive	7.87	8.50	
Industrials	10.10	11.54	
Basic Materials	2.36	2.72	
Financial Services	16.02	16.30	I
Real Estate	2.79	2.85	J.
Healthcare	14.14	13.49	
Energy	4.94	5.08	
Utilities	3.42	3.16	

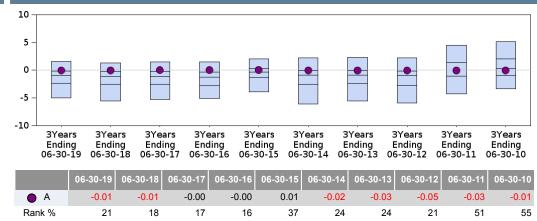


Statistics Relative to S&P 500 TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.01	-1.66
Beta	1.00	0.99
Sharpe Ratio	0.84	0.68
Information Ratio	-0.50	-1.27
RSquared	100.00	93.53
TrackingError	0.02	2.86

Alpha Relative to S&P 500 TR USD for 12 Quarter Rolling Periods



Fidelity® 500 Index

S&P 500 TR USD



Lansing Board of Water & Light 401(a) Plans Fidelity® Contrafund®

Ticker: FCNTX

Fund

Peers #Funds

Rank%

Ο Α

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Large Growth Benchmark: Russell 1000 Growth TR USD Fund Inception Date: 05-17-1967

Last Quarter

5.44

4.64

4.63

1414

30

Fund Manager: William Danoff Manager Tenure: 28.75 Years Website: www.institutional.fidelity.com

5 Year

12.53

13.39

11.27

1110

36

15.42

16.28

14.67

822

37

3 Year

17.81

18.07

16.92

1245

38

1 Year

7.92

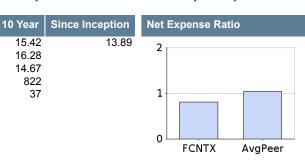
11.56

10.01

1383

73

Total Fund Assets: \$121.77 bn Net Expense Ratio: 0.82 Fund Family: Fidelity Investments



Pass Criteria
Yes

Returns for Periods Ending 06/30/2019

5.44

4.64

30

48

30 20 ۲ 10 0 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last 3 Years Last 5 Years Last 10 Years QTD YTD Last Year

7.92

11.56

73

33

17.81

18.07

38

34

Year to Date

20.77

21.49

21.10

1400

55

Returns for Calendar Years



Fidelity® Contrafund®

12.53

13.39

36

22

Russell 1000 Growth TR USD

20.77

21.49

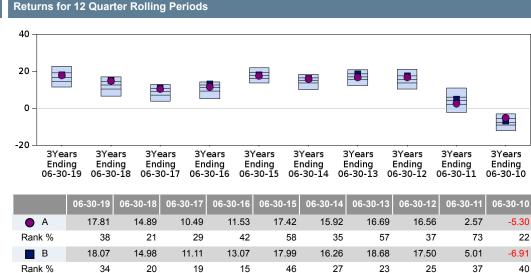
55

43

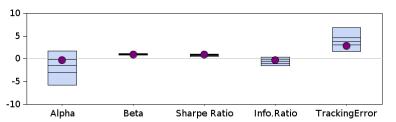


Lansing Board of Water & Light 401(a) Plans Fidelity® Contrafund®

Portfolio Analysis	Fund	Peer Group F
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	145,472.11 25.71 328.00	1 25.65
Sector Weightings (%)	Fund	Peer Group
Technology Communication Services Consumer Cyclical Consumer Defensive Industrials Basic Materials Financial Services Real Estate Healthcare Energy Utilities	36.39 0.95 16.31 3.99 2.98 1.40 22.46 0.31 12.99 1.89 0.35	32.86 1.96 17.13 4.81 9.86 2.06 12.93 1.49 14.56 1.69 0.66

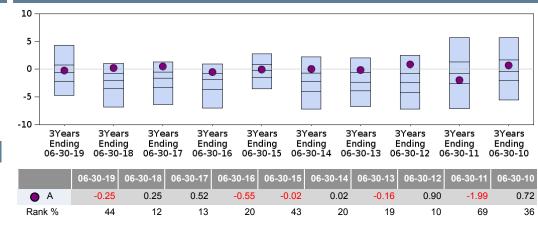


Statistics Relative to Russell 1000 Growth TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.29	-1.69
Beta	0.96	0.99
Sharpe Ratio	0.92	0.80
Information Ratio	-0.30	-0.59
RSquared	95.32	90.68
TrackingError	2.82	4.08

Alpha Relative to Russell 1000 Growth TR USD for 12 Quarter Rolling Periods



● Fidelity® Contrafund®

Russell 1000 Growth TR USD



Lansing Board of Water & Light 401(a) Plans MainStay Large Cap Growth I

Ticker: MLAIX

Fund

Peers #Funds

Rank%

Ο Α

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Large Growth Benchmark: Russell 1000 Growth TR USD Fund Inception Date: 07-03-1995

Last Quarter

4.65

4.64

4.63

1414

48

Fund Manager: Justin Kelly Manager Tenure: 13.66 Years Website: www.mainstayinvestments.com

5 Year

13.44

13.39

11.27

1110

21

15.63

16.28

14.67

822

31

3 Year

20.02

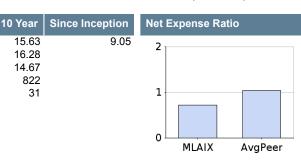
18.07

16.92

1245

18

Total Fund Assets: \$11.93 bn Net Expense Ratio: 0.73 Fund Family: MainStay



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

4.65

4.64

48

48

30 20 10 0 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last 3 Years Last 5 Years Last 10 Years QTD YTD Last Year

11.86

11.56

30

33

20.02

18.07

18

34

Year to Date

23.04

21.49

21.10

1400

25

1 Year

11.86

11.56

10.01

1383

30

Returns for Calendar Years



MainStay Large Cap Growth I

22

13.44

13.39

21

Russell 1000 Growth TR USD

23.04

21.49

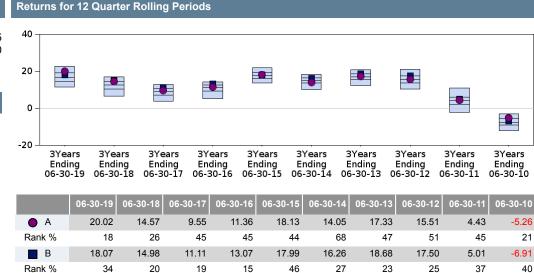
25

43

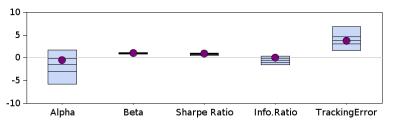


Lansing Board of Water & Light 401(a) Plans MainStay Large Cap Growth I

Portfolio Analysis	Fund	Peer Group	R
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	140,843.14 34.25 52.00	88,190.71 25.65 106.00	4
			2
Sector Weightings (%)	Fund	Peer Group	
Technology	35.97	32.86	
Communication Services	0.00	1.96	
Consumer Cyclical	23.62	17.13	-2
Consumer Defensive	0.00	4.81	
Industrials	9.16	9.86	
Basic Materials	2.62	2.06	
Financial Services	13.20	12.93	
Real Estate	1.20	1.49	
Healthcare	14.23	14.56	
Energy	0.00	1.69	
Utilities	0.00	0.66	

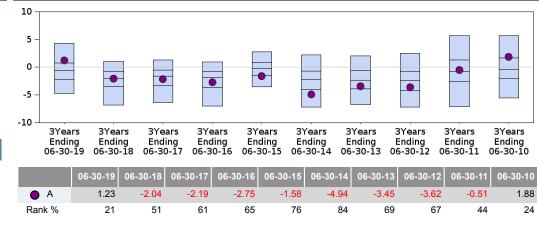


Statistics Relative to Russell 1000 Growth TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.46	-1.69
Beta	1.05	0.99
Sharpe Ratio	0.90	0.80
Information Ratio	0.01	-0.59
RSquared	93.14	90.68
TrackingError	3.78	4.08

Alpha Relative to Russell 1000 Growth TR USD for 12 Quarter Rolling Periods



MainStay Large Cap Growth I

Russell 1000 Growth TR USD



Lansing Board of Water & Light 401(a) Plans Fidelity® Mid Cap Index

Ticker: FSMDX

Fund

Peers

#Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Mid-Cap Blend Benchmark: Russell Mid Cap TR USD Fund Inception Date: 09-08-2011

Last Quarter

4.14

4.13

3.04

443

30

Year to Date

21.36

21.35

17.52

442

11

Fund Manager: Louis Bottari Manager Tenure: 7.75 Years Website: www.institutional.fidelity.com

5 Year

8.64

8.63

6.04

312

14

15.16

12.87

228

3 Year

12.16

12.16

9.98

362

26

1 Year

7.88

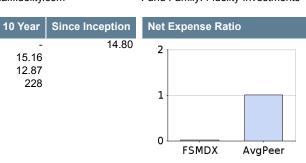
7.83

2.41

437

17

Total Fund Assets: \$10.32 bn Net Expense Ratio: 0.02 Fund Family: Fidelity Investments



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

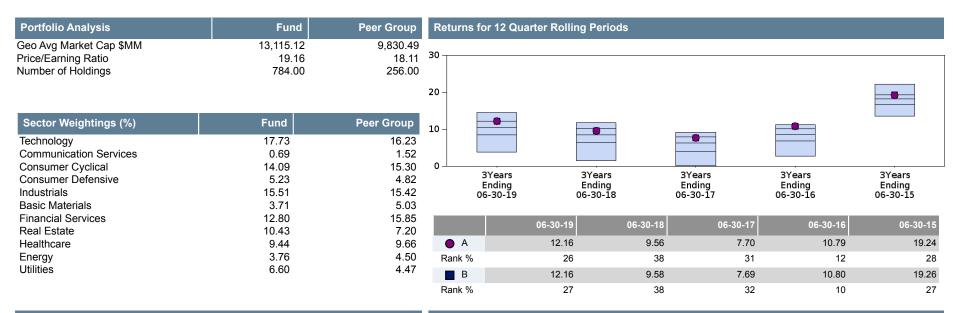
Returns for Periods Ending 06/30/2019

40 50 -• 20 0 0 0 -0--0 -20 -50 Year to Date Last Year Last 3 Years Last 5 Years 2018 2017 2016 2015 2014 2013 2012 Last Quarter Last 3 Years Last Year Last 5 Years 2018 2016 2015 2013 2012 YTD • A 4.14 21.36 7.88 12.16 8.64 Ο Α -9.05 18.47 13.86 -2.44 13.11 34.78 17.22 Rank % 30 17 26 Rank % 31 26 35 15 46 51 11 14 63 4.13 21.35 7.83 12.16 -9.06 18.52 13.80 -2.44 13.22 34.76 17.28 **B** 8.63 **B** Rank % 31 12 19 27 15 Rank % 31 25 64 35 14 48 49 Fidelity® Mid Cap Index Russell Mid Cap TR USD

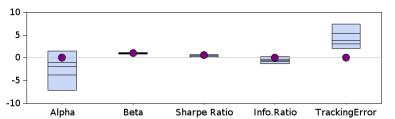
Returns for Calendar Years



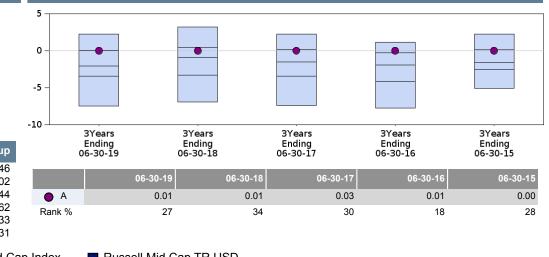
Lansing Board of Water & Light 401(a) Plans Fidelity® Mid Cap Index



Statistics Relative to Russell Mid Cap TR USD for 5 Years



Alpha Relative to Russell Mid Cap TR USD for 12 Quarter Rolling Periods



Risk Measures 5 Yr	Fund	Peer Group
Alpha	0.02	-2.46
Beta	1.00	1.02
Sharpe Ratio	0.64	0.44
Information Ratio	0.05	-0.62
RSquared	100.00	90.33
TrackingError	0.08	4.31

Fidelity® Mid Cap Index

Russell Mid Cap TR USD



Lansing Board of Water & Light 401(a) Plans JPMorgan Mid Cap Value R6

Ticker: JMVYX

Fund

Peers #Funds

Rank%

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Mid-Cap Value Benchmark: Russell Mid Cap Value TR USD Fund Inception Date: 11-13-1997

Last Quarter

3.10

3.19

2.52

421

45

Year to Date

18.23

18.02

15.80

419

27

1 Year

4.63

3.68

0.25

415

18

Fund Manager: Jonathan Simon Manager Tenure: 21.58 Years Website: www.jpmorganfunds.com

5 Year

7.18

6.72

5.57

321

21

3 Year

8.51

8.95

8.73

363

64

10 Year

14.40

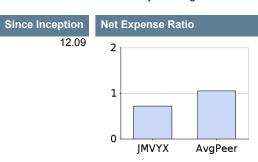
14.56

12.75

217

11

Total Fund Assets: \$17.03 bn Net Expense Ratio: 0.73 Fund Family: JPMorgan



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

45

41

3.19

30 20 O 10 0 -10 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last 3 Years Last 5 Years Last 10 Years QTD YTD Last Year Ο Α 3.10 18.23 4.63 8.51 7.18 14.40

18

25

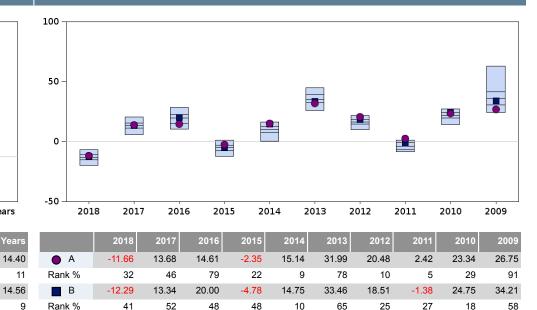
3.68

64

8.95

55

Returns for Calendar Years



• JPMorgan Mid Cap Value R6

21

6.72

29

Russell Mid Cap Value TR USD

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27

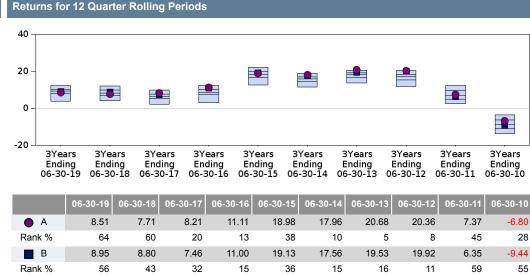
30

18.02

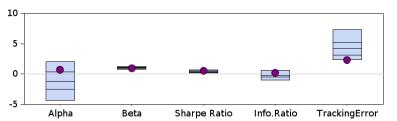


Lansing Board of Water & Light 401(a) Plans JPMorgan Mid Cap Value R6

Portfolio Analysis	Fun	d Peer Group	Returns fo
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	14,021.8 16.5 110.0	56 15.62	40
			20 –
Sector Weightings (%)	Fund	Peer Group	0
Technology	8.39	11.00	
Communication Services	1.21	0.71	
Consumer Cyclical	17.05	15.05	-20
Consumer Defensive	4.21	5.84	3Ye End
Industrials	6.46	14.08	06-30
Basic Materials	2.55	5.21	
Financial Services	23.47	20.54	
Real Estate	13.02	7.69	
Healthcare	6.68	7.73	Ο Α
Energy	7.21	6.12	Rank %
Utilities	9.75	6.02	B

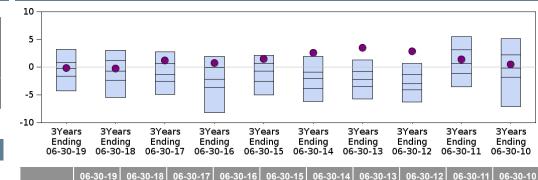


Statistics Relative to Russell Mid Cap Value TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	0.70	-1.20
Beta	0.95	1.04
Sharpe Ratio	0.55	0.41
Information Ratio	0.20	-0.25
RSquared	96.72	90.70
TrackingError	2.32	4.39

Alpha Relative to Russell Mid Cap Value TR USD for 12 Quarter Rolling Periods



	06-30-19	06-30-18	06-30-17	06-30-16	06-30-15	06-30-14	06-30-13	06-30-12	06-30-11	06-30-10
Ο Α	-0.13	-0.23	1.22	0.73	1.53	2.60	3.48	2.89	1.44	0.53
Rank %	48	44	20	11	16	3	2	3	42	40

• JPMorgan Mid Cap Value R6

Russell Mid Cap Value TR USD



Lansing Board of Water & Light 401(a) Plans T. Rowe Price Instl Mid-Cap Equity Gr

Ticker: PMEGX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Mid-Cap Growth Benchmark: Russell Mid Cap Growth TR USD Fund Inception Date: 07-31-1996

Last Quarter

7.26

5.40

5.61

610

24

Fund Manager: Brian Berghuis Manager Tenure: 22.91 Years Website: www.troweprice.com

5 Year

13.56

11.10

9.78

484

8

3 Year

17.52

16.49

15.59

539

30

10 Year

17.68

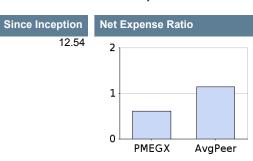
16.02

14.53

367

3

Total Fund Assets: \$7.98 bn Net Expense Ratio: 0.61 Fund Family: T. Rowe Price



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

QTD

7.26

24

5.40

57

40 8 20 0 -20 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years

Last Year

16.66

13.94

14

30

Last 3 Years

17.52

16.49

30

38

Year to Date

25.41

26.08

24.97

609

52

1 Year

16.66

13.94

9.88

602

14

Returns for Calendar Years



T. Rowe Price Instl Mid-Cap Equity Gr

13.56

11.10

31

19

8

Russell Mid Cap Growth TR USD

38

51

14

49

40

41

42

23

39

YTD

25.41

26.08

52

44

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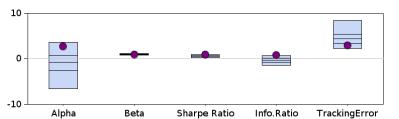
Rank %



Lansing Board of Water & Light 401(a) Plans T. Rowe Price Instl Mid-Cap Equity Gr

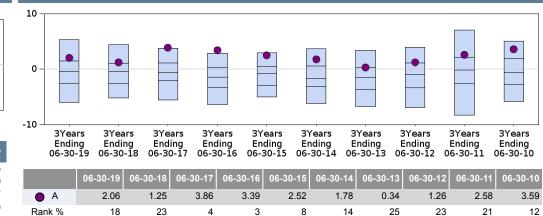
Portfolio Analysis	Fund	Peer Group	Returns	s for 12 C	Quarter	Rolling	Periods	;						
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	14,089.93 24.46 136.00	11,993.10 27.11 111.00	40											
Sector Weightings (%)	Fund	Peer Group	20 -	2										
Technology	23.03	28.38	0											
Communication Services	0.00	0.98												
Consumer Cyclical	13.90	16.05	-20											
Consumer Defensive	6.42	3.97	-	BYears Ending	3Years Ending					3Years Ending	3Years Ending	3Years Ending	3Years Ending	3Years Ending
Industrials	21.15	17.28			06-30-1								06-30-11	06-30-10
Basic Materials	3.16	2.48												
Financial Services	8.19	8.82		06-3	0-19 0	6-30-18	06-30-17	06-30-1	6 06-30-1	5 06-30-1	4 06-30-13	3 06-30-12	06-30-11	06-30-10
Real Estate	0.93	4.83												
Healthcare	18.39	15.13	Ο Α	1	7.52	11.88	12.07	14.0	1 21.7) 15.5	8 19.18	3 20.05	9.20	-3.93
Energy	3.49	1.48	Rank %	6	30	24	3		1	3 1	6 27	7 16	18	15
Utilities	1.35	0.61	B	1	6.49	10.73	7.83	10.5	19.24	4 14.5	4 19.53	3 19.01	6.58	-7.53
			Rank %	6	38	39	35	2	.7 2	6 2	6 19	9 31	44	54

Statistics Relative to Russell Mid Cap Growth TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	2.73	-1.05
Beta	0.94	0.99
Sharpe Ratio	0.96	0.67
Information Ratio	0.83	-0.40
RSquared	95.48	89.58
TrackingError	2.95	4.71

Alpha Relative to Russell Mid Cap Growth TR USD for 12 Quarter Rolling Periods



• T. Rowe Price Instl Mid-Cap Equity Gr

Russell Mid Cap Growth TR USD



Lansing Board of Water & Light 401(a) Plans American Beacon Small Cap Value R6

Ticker: AASRX

Fund

Peers #Funds

Rank%

Rank %

Benchmark

Peer Group/Category: Morningstar Small Value Benchmark: Russell 2000 Value TR USD Fund Inception Date: 12-31-1998

Last Quarter

1.78

1.37

0.63

425

36

Fund Manager: James Miles Manager Tenure: 20.50 Years Website: www.americanbeaconfunds.com

5 Year

4.77

5.39

3.59

337

33

13.05

12.40

11.65

226

21

3 Year

8.62

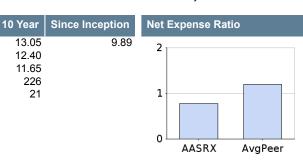
9.81

7.69

379

36

Total Fund Assets: \$6.33 bn Net Expense Ratio: 0.78 Fund Family: American Beacon



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

47

20 -0 -20 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last Year Last 3 Years Last 5 Years Last 10 Years QTD YTD • A 1.78 14.21 -7.61 8.62 4.77 13.05 36 36 56 33 Rank % 36 21 В 1.37 13.47 -6.24 9.81 5.39 12.40

38

20

Year to Date

14.21

13.47

12.92

425

36

1 Year

-7.61

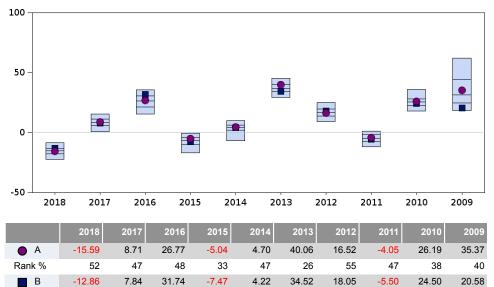
-6.24

-8.05

417

56

Returns for Calendar Years



American Beacon Small Cap Value R6

24

38

Russell 2000 Value TR USD

13

60

52

71

41

59

63

89

57

51

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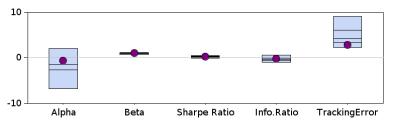
Rank %



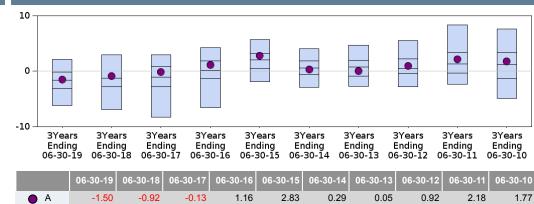
Lansing Board of Water & Light 401(a) Plans American Beacon Small Cap Value R6

Portfolio Analysis	Fund	Peer Group	Returns	for 12 (Quarter F	Rolling F	Periods						
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	2,373.01 13.90 536.00	1,978.63 13.92 231.00	40										
Sector Weightings (%)	Fund	Peer Group	20 -									-	
Technology Communication Services Consumer Cyclical Consumer Defensive Industrials	14.47 0.18 14.83 2.35 20.07	11.34 0.67 14.48 4.01 16.72	-20	Years nding	3Years Ending 06-30-18	3Years Ending 06-30-1	g Ending	3Years Ending 06-30-1	Ending	3Years Ending 06-30-13	3Years Ending 06-30-12	3Years Ending 06-30-11	3Years Ending 06-30-10
Basic Materials Financial Services Real Estate Healthcare	5.97 28.52 4.27 2.38	6.72 24.37 8.93 4.03	• A	06-3		30-18 06 9.88		30-16 06-3	30-15 06-30		3 06-30-12	06-30-11	06-30-10
Energy Utilities	4.56 2.40	4.03 5.17 3.57	Rank %		36	37 11.22	33 7.02	31	24	33 3 4.65 17.3	6 22	33	42
Statistics Relative to Russell 2000 Valu	ue TR USD for 5 Years		Rank %		20 to Russe	20 20	27 /alue TR U	48 SD for 12	66 Quarter Ro	52 5		64	64





Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.64	-1.48
Beta	1.03	0.97
Sharpe Ratio	0.31	0.25
Information Ratio	-0.22	-0.32
RSquared	97.36	90.21
TrackingError	2.83	5.27



American Beacon Small Cap Value R6

Russell 2000 Value TR USD

FOR CLIENT USE ONLY.

Rank %



Lansing Board of Water & Light 401(a) Plans Fidelity® Small Cap Index

Ticker: FSSNX

Fund

Peers

#Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Small Blend Benchmark: Russell 2000 TR USD Fund Inception Date: 09-08-2011

Last Quarter

2.13

2.10

2.21

749

50

Year to Date

17.00

16.98

15.74

745

37

Fund Manager: Louis Bottari Manager Tenure: 7.75 Years Website: www.institutional.fidelity.com

5 Year

7.28

7.06

5.65

516

23

13.45

12.70

375

3 Year

12.46

12.30

10.09

633

16

1 Year

-3.21

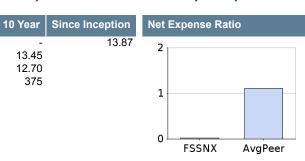
-3.31

-3.76

733

43

Total Fund Assets: \$9.40 bn Net Expense Ratio: 0.02 Fund Family: Fidelity Investments



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

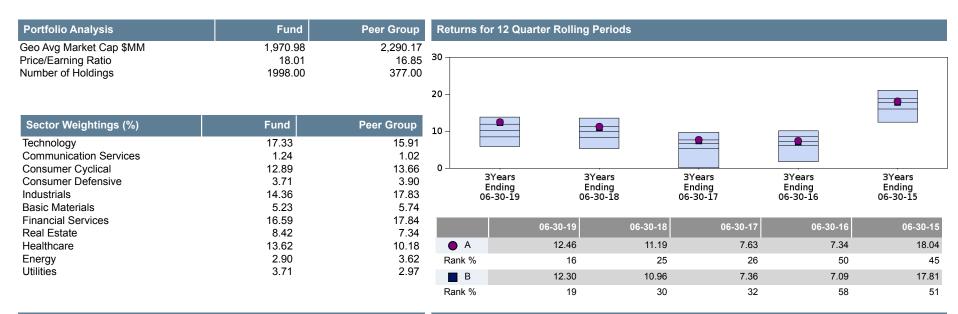
Returns for Periods Ending 06/30/2019

40 50 -20 -0-_ 0 -0 • -20 -50 Year to Date Last Year Last 3 Years Last 5 Years 2018 2017 2016 2015 2014 2013 2012 Last Quarter Last 3 Years YTD Last Year Last 5 Years 2018 2016 2015 2013 2012 • A 2.13 17.00 -3.21 12.46 7.28 Ο Α -10.88 14.85 21.63 -4.24 5.19 39.02 16.38 Rank % 50 37 43 16 23 Rank % 35 23 48 45 44 44 49 2.10 16.98 -3.31 12.30 -11.01 14.65 21.31 -4.41 4.89 38.82 16.35 **B** 7.06 B Rank % 52 38 46 19 28 Rank % 38 26 53 53 51 47 44 Fidelity® Small Cap Index Russell 2000 TR USD

Returns for Calendar Years



Lansing Board of Water & Light 401(a) Plans Fidelity® Small Cap Index



Statistics Relative to Russell 2000 TR USD for 5 Years

Risk Measures 5 Yr

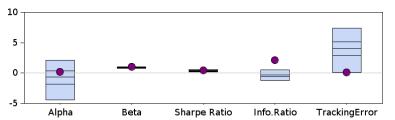
Information Ratio

RSquared

TrackingError

Alpha

Beta Sharpe Ratio



Fund

0.20

1.00

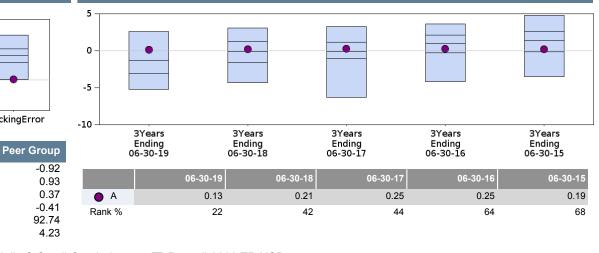
0.45

2.11

0.10

100.00

Alpha Relative to Russell 2000 TR USD for 12 Quarter Rolling Periods



Fidelity® Small Cap Index

Russell 2000 TR USD



Ticker: TSCPX

Lansing Board of Water & Light 401(a) Plans AMG TimesSquare Small Cap Growth N

Peer Group/Category: Morningstar Small Growth Fund Manager: Grant Babyak Total Fund Assets: \$1.04 bn Pass Benchmark: Russell 2000 Growth TR USD Manager Tenure: 19.41 Years Net Expense Ratio: 1.11 Criteria Criteria Fund Inception Date: 01-21-2000 Website: www.amgfunds.com Fund Family: AMG Funds Return 1Yr Yes Last Quarter Year to Date 3 Year 5 Year 10 Year Since Inception Net Expense Ratio 1 Year Return 5Yr Yes 4.35 25.63 8.34 16.15 10.34 15.25 9.56 Fund 2 Expense Ratio Yes 2.75 20.36 -0.49 14.69 8.63 Benchmark 14.41 4.12 21.82 3.22 16.03 9.17 14.46 Peers Prod Hist Yes #Funds 684 683 672 585 516 395 45 28 25 47 36 36 Rank% 1 Manager Tenure Yes AUM Yes 0 Alpha 5Yr Yes TSCPX AvgPeer Returns for Periods Ending 06/30/2019 **Returns for Calendar Years** 40 100



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2009

35.52

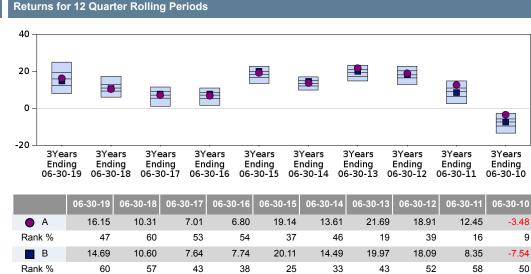
34.47

49

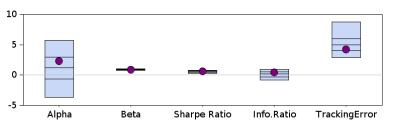


Lansing Board of Water & Light 401(a) Plans AMG TimesSquare Small Cap Growth N

Portfolio Analysis	Fund	Peer Group	Ret
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	2,400.26 26.31 103.00	24.83	40
			20
Sector Weightings (%)	Fund	Peer Group	0
Technology	31.02	27.08	
Communication Services	2.81	0.86	
Consumer Cyclical	11.21	13.74	-20
Consumer Defensive	7.19	4.63	
Industrials	21.82	15.78	
Basic Materials	1.68	3.98	
Financial Services	6.69	8.40	
Real Estate	3.06	3.15	
Healthcare	12.26	20.00	
Energy	2.24	1.67	Ra
Utilities	0.00	0.72	

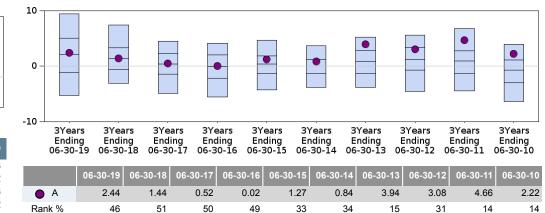


Statistics Relative to Russell 2000 Growth TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	2.32	1.08
Beta	0.89	0.92
Sharpe Ratio	0.65	0.56
Information Ratio	0.41	0.12
RSquared	94.37	90.62
TrackingError	4.24	5.29

Alpha Relative to Russell 2000 Growth TR USD for 12 Quarter Rolling Periods



AMG TimesSquare Small Cap Growth N

Russell 2000 Growth TR USD



Lansing Board of Water & Light 401(a) Plans Oakmark International Advisor

Ticker: OAYIX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Foreign Large Value Benchmark: MSCI EAFE NR USD Fund Inception Date: 09-30-1992

Last Quarter

3.36

3.68

1.71

356

8

Year to Date

12.78

14.03

10.51

354

12

Fund Manager: David Herro Manager Tenure: 26.75 Years Website: www.oakmark.com

5 Year

1.54

2.25

0.08

238

14

10 Year

9.07

6.90

5.67

161

4

3 Year

10.64

9.11

6.84

297

3

1 Year

-6.42

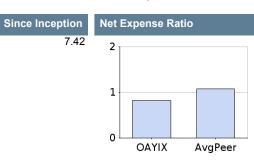
1.08

-2.01

339

92

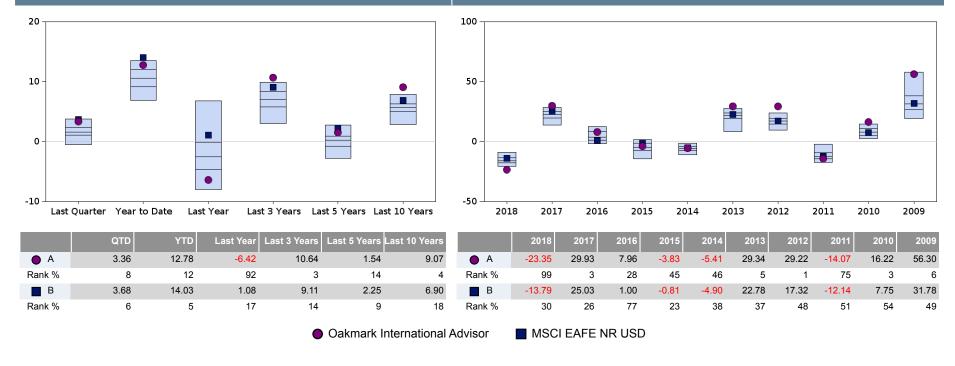
Total Fund Assets: \$33.01 bn Net Expense Ratio: 0.83 Fund Family: Oakmark



Criteria	Pass Criteria
Return 1Yr	No
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

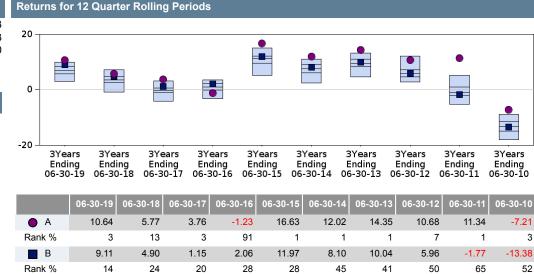
Returns for Calendar Years



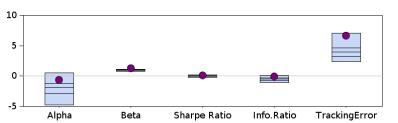


Lansing Board of Water & Light 401(a) Plans Oakmark International Advisor

Fund	Peer Group	R
29,416.12 12.72 82.00	26,516.43 12.13 212.00	2
Fund	Peer Group	
6.00	2.60	
0.92	1.48	
1.71	4.11	-2
18.97	18.54	
55.56	39.38	
2.23	0.35	
0.00	0.55	
5.26	17.91	
2.09	3.80	
7.24	11.28	
0.00	-	
	29,416.12 12.72 82.00 Fund 6.00 0.92 1.71 18.97 55.56 2.23 0.00 5.26 2.09 7.24	29,416.12 26,516.43 12.72 12.13 82.00 212.00 Fund Peer Group 6.00 2.60 0.92 1.48 1.71 4.11 18.97 18.54 55.56 39.38 2.23 0.35 0.00 0.55 5.26 17.91 2.09 3.80 7.24 11.28

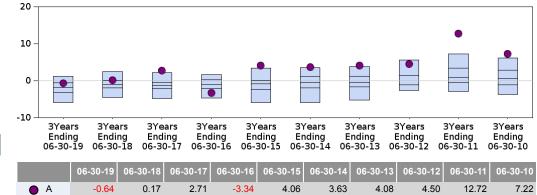






Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.65	-2.04
Beta	1.26	0.97
Sharpe Ratio	0.12	-
Information Ratio	-0.11	-0.53
RSquared	87.71	89.07
TrackingError	6.64	4.18

Alpha Relative to MSCI EAFE NR USD for 12 Quarter Rolling Periods



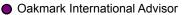
92

2

5

4

7



Rank %

MSCI EAFE NR USD

3

25

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31



Lansing Board of Water & Light 401(a) Plans Vanguard Total Intl Stock Index Admiral

Ticker: VTIAX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Foreign Large Blend Benchmark: FTSE Global All Cap ex US TR USD Fund Inception Date: 04-29-1996

Last Quarter

2.75

2.99

2.98

759

65

Year to Date

13.27

13.58

13.58

746

62

1 Year

0.57

0.81

-0.05

722

42

Fund Manager: Michael Perre Manager Tenure: 10.83 Years Website: www.vanguard.com

5 Year

2.31

2.70

2.03

488

35

3 Year

8.94

9.51

8.13

611

30

10 Year

6.59

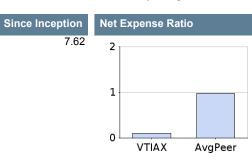
7.26

6.44

366

50

Total Fund Assets: \$381.62 bn Net Expense Ratio: 0.11 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

2.75

2.99

65

57

20 • 10 -____ 0 -10 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last 3 Years Last 5 Years Last 10 Years QTD YTD Last Year

0.57

42

40

0.81

8.94

30

15

9.51

Returns for Calendar Years



79

21

78

53

56

23

9

Vanguard Total Intl Stock Index Admiral

2.31

2.70

21

21

35

FTSE Global All Cap ex US TR USD

14

23

13.27

13.58

62

51

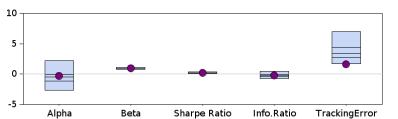
Rank %



Lansing Board of Water & Light 401(a) Plans Vanguard Total Intl Stock Index Admiral

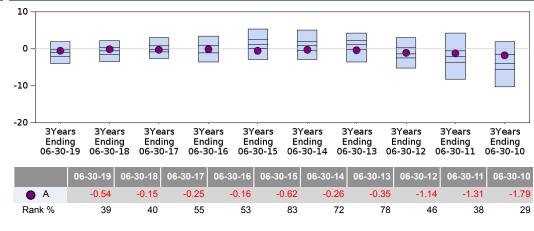
Portfolio Analysis	Fund	Peer Group	Returns f	for 12 Qua	arter Ro	olling Pe	eriods							
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	21,962.75 13.74 6368.00	30,440.89 14.71 467.00	20						•	•				
International Exposure (%)	Fund	Peer Group	0											
United States Latin America	1.10 3.07	3.62 1.53	-20											-
Canada United Kingdom Europe	6.93 11.25 30.82	3.38 14.92 40.31	3Ye Ene	ding En	ears ding 30-18 (3Years Ending 06-30-17	3Ye End 06-30	ing Ei	nding E	nding	Ending	3Years Ending 06-30-12	3Years Ending 06-30-11	3Years Ending 06-30-10
Africa	1.58	0.50		50-13 00-	50-10	00-30-17	00-30	J-10 00-	.50-15 00	-50-14 0	0-30-13 (0-30-12		00-30-10
Middle East Japan	1.18 17.04	0.45 17.87		06-30-1	9 06-30)-18 06-	30-17	06-30-16	06-30-15	06-30-14	06-30-13	06-30-12	06-30-11	06-30-10
Australia	4.63	3.91	Ο Α	8.9	4 5	5.33	1.35	2.02	9.89	5.89	8.28	6.68	-0.39	-11.46
Asia	22.42	13.51	Rank %	3	C	34	53	50	76	69	77	42	39	36
Not Classified	0.00	-	В	9.5	1 5	5.77	1.65	2.23	10.43	6.24	8.64	7.85	0.98	-9.97
			Rank %	1	5	21	44	42	67	64	- 70	25	22	20

Statistics Relative to FTSE Global All Cap ex US TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.34	-0.53
Beta	0.98	0.94
Sharpe Ratio	0.18	0.16
Information Ratio	-0.24	-0.22
RSquared	98.39	91.17
TrackingError	1.58	3.68

Alpha Relative to FTSE Global All Cap ex US TR USD for 12 Quarter Rolling Periods



Vanguard Total Intl Stock Index Admiral

FTSE Global All Cap ex US TR USD



Lansing Board of Water & Light 401(a) Plans American Funds Europacific Growth R6

Ticker: RERGX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Foreign Large Blend Benchmark: MSCI EAFE NR USD Fund Inception Date: 04-16-1984

Last Quarter

3.87

3.68

2.98

759

18

Fund Manager: Mark Denning Manager Tenure: 27.50 Years Website: www.americanfunds.com

5 Year

4.45

2.25

2.03

488

6

10 Year

8.15

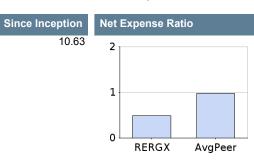
6.90

6.44

366

7

Total Fund Assets: \$161.66 bn Net Expense Ratio: 0.49 Fund Family: American Funds



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

3.87

18

24

3.68

20 10 -_ 0 -10 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last Year Last 3 Years Last 5 Years Last 10 Years QTD YTD

1.91

23

1.08

37

10.84

4

9.11

25

Year to Date

17.59

14.03

13.58

746

6

1 Year

1.91

1.08

-0.05

722

23

3 Year

10.84

9.11

8.13

611

4

Returns for Calendar Years



American Funds Europacific Growth R6

35

4.45

2.25

39

6

MSCI EAFE NR USD

56

48

46

21

63

29

73

50

58

17.59

14.03

6

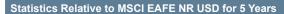
39

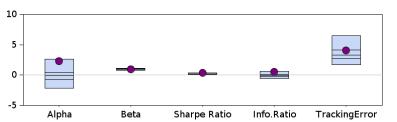
Rank %



Lansing Board of Water & Light 401(a) Plans American Funds Europacific Growth R6

Portfolio Analysis	Fund	Peer Group	Returns fo	or 12 Quarte	r Rolling	Periods	i						
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	43,954.74 15.65 342.00	30,440.89 14.71 467.00	20				•						
International Exposure (%)	Fund	Peer Group											_
United States Latin America	1.42 6.02	3.62 1.53											
Canada United Kingdom Europe	4.06 10.09 27.59	3.38 14.92 40.31	-20 ⊥	ing Ending	Endi	ng End	ding E	nding E	nding	3Years Ending 06-30-13	3Years Ending 06-30-12	3Years Ending 06-30-11	3Years Ending 06-30-10
Africa	0.74	0.50			.0 00-30	-17 00-3	0-10 00	-50-15 00		0-30-13		00-50-11	00-30-10
Middle East Japan	0.89 13.63	0.45 17.87		06-30-19 0	6-30-18	06-30-17	06-30-16	06-30-15	06-30-14	4 06-30-13	06-30-12	06-30-11	06-30-10
Australia	0.90	3.91	Ο Α	10.84	6.51	3.72	3.76	12.71	7.40	9.44	7.50	1.93	-7.79
Asia	34.65	13.51	Rank %	4	11	10	15	21	41	1 54	- 29	15	9
Not Classified	0.00	-	B	9.11	4.90	1.15	2.06	11.97	8.10) 10.04	5.96	-1.77	-13.38
			Rank %	25	48	59	48	33	21	1 41	56	62	65





Risk Measures 5 Yr	Fund	Peer Group
Alpha	2.25	-0.12
Beta	0.94	0.95
Sharpe Ratio	0.35	0.16
Information Ratio	0.55	-0.07
RSquared	89.51	91.59
TrackingError	4.02	3.56



	06-30-19	06-30-18	06-30-17	06-30-16	06-30-15	06-30-14	06-30-13	06-30-12	06-30-11	06-30-10
Ο Α	1.25	2.02	2.62	1.89	2.48	-0.21	0.10	1.71	3.42	5.21
Rank %	8	14	10	15	13	35	41	28	18	11

American Funds Europacific Growth R6

MSCI EAFE NR USD

Alpha Relative to MSCI EAFE NR USD for 12 Quarter Rolling Periods



Lansing Board of Water & Light 401(a) Plans Vanguard International Growth Adm

Ticker: VWILX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Foreign Large Growth Benchmark: MSCI EAFE Growth NR USD Fund Inception Date: 09-30-1981

Last Quarter

3.23

5.73

4.81

483

84

Fund Manager: James Anderson Manager Tenure: 16.33 Years Website: www.vanguard.com

3 Year

15.36

9.68

9.63

396

4

5 Year

6.78

4.39

4.09

336

11

10 Year

10.10

8.23

8.18

250

11

Total Fund Assets: \$37.11 bn Net Expense Ratio: 0.32 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	No
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

QTD

3.23

84

5.73

31

30 20 10 -----0 -10 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year

Last Year

-0.40

76

28

4.24

Last 3 Years

15.36

4

9.68

43

Year to Date

18.63

18.47

18.29

479

47

1 Year

-0.40

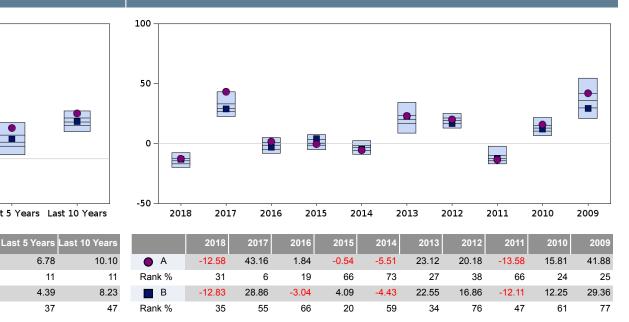
4.24

2.25

465

76

Returns for Calendar Years



Vanguard International Growth Adm

37

6.78

11

4.39

MSCI EAFE Growth NR USD

YTD

18.63

18.47

47

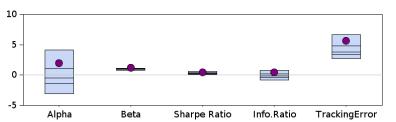
48



Lansing Board of Water & Light 401(a) Plans Vanguard International Growth Adm

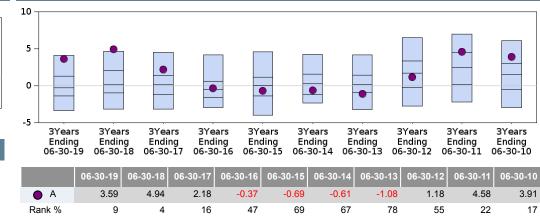
Portfolio Analysis	Fund	Peer Group	Returns for 1	2 Quarter	Rolling Pe	eriods						
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	56,738.78 20.21 126.00	32,931.49 21.07 116.00	20			•			•			
International Exposure (%) United States Latin America Canada United Kingdom Europe	Fund 11.35 3.03 1.03 8.83 34.43	Peer Group 7.59 2.25 4.64 13.59 37.17	-20 3Years Ending	3Years Ending	Ending	3Years Ending	Ending	Ending	3Years Ending	3Years Ending	3Years Ending	3Years Ending
Africa Middle East Japan Australia	0.00 0.00 10.89 0.39	0.69 0.49 13.19 2.64	06-30-19		3 06-30-17 5-30-18 06- 12.26		-30-16 06-	30-15 06-30-		3 06-30-12		
Asia Not Classified	30.04 0.00	17.73 -	Rank %	4 9.68 44	3 6.41 43	15 2.81 46	33 4.17 32	12.11 7.	54 6 [.] 68 10.8 54 52	5 7.62	-1.85	i -11.70

Statistics Relative to MSCI EAFE Growth NR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	1.94	-0.12
Beta	1.18	0.97
Sharpe Ratio	0.45	0.31
Information Ratio	0.43	-0.11
RSquared	88.72	88.94
TrackingError	5.60	4.22

Alpha Relative to MSCI EAFE Growth NR USD for 12 Quarter Rolling Periods



Vanguard International Growth Adm

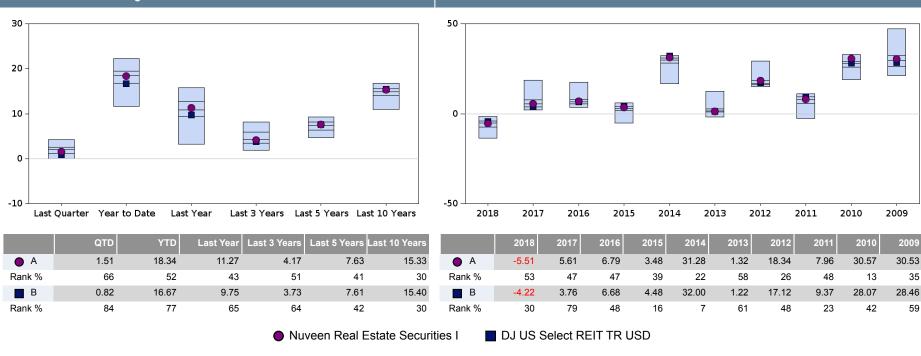
MSCI EAFE Growth NR USD



Ticker: FARCX

Lansing Board of Water & Light 401(a) Plans Nuveen Real Estate Securities I

Total Fund Assets: \$3.39 bn Peer Group/Category: Morningstar Real Estate Fund Manager: Jay Rosenberg Pass Benchmark: DJ US Select REIT TR USD Manager Tenure: 14.08 Years Net Expense Ratio: 1.02 Criteria Criteria Fund Inception Date: 06-30-1995 Website: www.nuveen.com Fund Family: Nuveen Return 1Yr Yes Last Quarter Year to Date 5 Year 10 Year Since Inception Net Expense Ratio 1 Year 3 Year Return 5Yr Yes Fund 1.51 18.34 11.27 4.17 7.63 15.33 11.44 2 Expense Ratio Yes 0.82 15.40 16.67 9.75 3.73 7.61 Benchmark Peers 1.93 18.33 10.45 4.66 7.23 14.53 Prod Hist Yes #Funds 271 267 259 226 198 139 66 52 43 51 41 30 Rank% 1 Manager Tenure Yes AUM Yes 0 Alpha 5Yr Yes FARCX AvgPeer



Returns for Periods Ending 06/30/2019

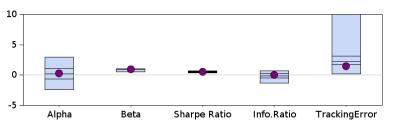
Returns for Calendar Years



Lansing Board of Water & Light 401(a) Plans Nuveen Real Estate Securities I

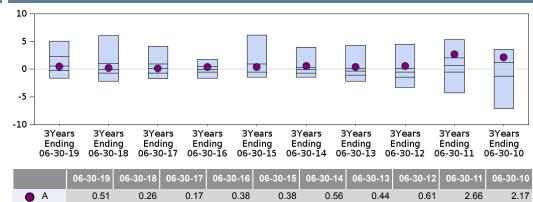
Portfolio Analysis	Fund	Peer Group	Returns	s for 12 G	Quarter I	Rolling P	eriods							
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	13,819.24 30.79 93.00	12,753.48 30.20 82.00	50								-0-			
Sector Weightings (%)	Fund	Peer Group	0											
Technology Communication Services	0.00 0.00	0.71 2.49												
Consumer Cyclical Consumer Defensive	0.00 0.00	1.60 0.01	-		3Years Ending	3Years Ending					3Years Ending	3Years Ending	3Years Ending	3Years Ending
Industrials Basic Materials	0.00 0.00	0.29 0.26			06-30-18								06-30-11	06-30-10
Financial Services Real Estate	0.00 100.00	0.26 94.03		06-30	0-19 06-	-30-18 06	6-30-17	06-30-16	06-30-15	06-30-14	06-30-13	06-30-12	06-30-11	06-30-10
Healthcare	0.00	0.20	Ο Α	4	4.17	7.72	7.89	13.48	8.67	11.64	18.11	32.64	7.92	-6.43
Energy	0.00	0.03	Rank %	6	52	37	40	26	31	17	' 17	33	19	14
Utilities	0.00	0.13	B	:	3.73	7.71	8.04	13.55	8.67	11.38	8 18.08	33.52	4.71	-10.33
			Rank %	, 0	64	38	36	24	31	26	5 18	18	70	74

Statistics Relative to DJ US Select REIT TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	0.28	0.25
Beta	0.95	0.91
Sharpe Ratio	0.53	0.53
Information Ratio	0.01	-0.23
RSquared	99.12	92.81
TrackingError	1.48	3.32

Alpha Relative to DJ US Select REIT TR USD for 12 Quarter Rolling Periods



27

37

22

14

14

21

14

Nuveen Real Estate Securities I

DJ US Select REIT TR USD

48

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54

44

Rank %



Lansing Board of Water & Light 401(a) Plans American Funds Capital World Gr&Inc R6

Ticker: RWIGX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar World Large Stock Benchmark: MSCI ACWI NR USD Fund Inception Date: 03-26-1993

Last Quarter

3.00

3.61

3.54

908

62

Fund Manager: Mark Denning Manager Tenure: 26.25 Years Website: www.americanfunds.com

5 Year

6.03

6.16

5.96

597

45

3 Year

10.97

11.62

11.05

725

47

10 Year

10.23

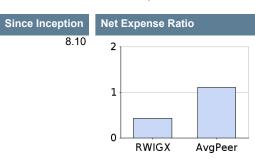
10.15

10.25

355

50

Total Fund Assets: \$97.36 bn Net Expense Ratio: 0.44 Fund Family: American Funds



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

3.00

3.61

62

50

30 20 10 -. 0 -10 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year Last 5 Years Last 10 Years Last 3 Years QTD YTD Last Year

3.46

64

5.74

46

10.97

11.62

47

37

Year to Date

15.62

16.23

16.47

903

54

1 Year

3.46

5.74

4.90

864

64

Returns for Calendar Years



American Funds Capital World Gr&Inc R6

50

6.03

6.16

45

43

MSCI ACWI NR USD

32

68

42

67

44

57

50

37

45

15.62

16.23

54

51

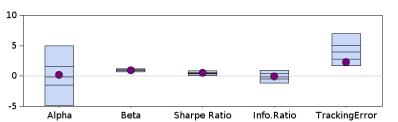
Rank %



Lansing Board of Water & Light 401(a) Plans American Funds Capital World Gr&Inc R6

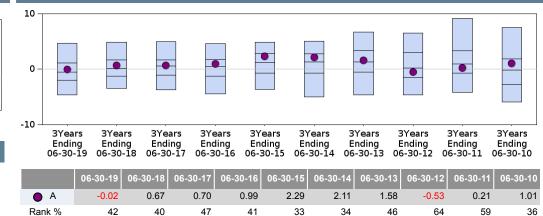
Portfolio Analysis	Fund	Peer Group	Returns fo	r 12 Quarter	Rolling Pe	eriods						
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	75,404.05 15.55 349.00	51,637.24 18.95 193.00	20						•	•		
International Exposure (%)	Fund	Peer Group	Ũ									
United States Latin America Canada United Kingdom Europe Africa	48.07 2.52 2.30 10.35 17.10 0.20	53.12 1.20 2.87 7.79 18.06 0.32	-20 3Yea Endi 06-30	ng Ending	3Years Ending 8 06-30-17	3Year Endin 06-30-	g Ending	g Ending	Ending	3Years Ending 06-30-12	3Years Ending 06-30-11	3Years Ending 06-30-10
Middle East Japan	0.24 3.66	0.22 5.89		06-30-19 06	-30-18 06-	30-17 06	6-30-16 06	-30-15 06-3	0-14 06-30-1	3 06-30-12	06-30-11	06-30-10
Australia	0.37	1.19	Ο Α	10.97	8.58	5.22	6.70	14.49 1	1.87 13.6	4 10.04	1.15	-8.90
Asia	15.18	9.34	Rank %	47	36	49	42	39	40 4	9 65	58	34
Not Classified	0.00	-	B	11.62	8.19	4.82	6.03	13.01 1	0.25 12.3	6 10.80	0.92	-10.51
			Rank %	37	44	58	55	60	70 7	53 53	63	52





Risk Measures 5 Yr	Fund	Peer Group
Alpha	0.22	0.01
Beta	0.93	0.97
Sharpe Ratio	0.50	0.47
Information Ratio	-0.06	-0.07
RSquared	96.49	88.88
TrackingError	2.25	4.13

Alpha Relative to MSCI ACWI NR USD for 12 Quarter Rolling Periods



American Funds Capital World Gr&Inc R6

MSCI ACWI NR USD



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement Income Inv

Ticker: VTINX

Fund

Peers

#Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date Retirement Benchmark: S&P Target Date Retirement Income TR USD Fund Inception Date: 10-27-2003

Last Quarter

2.97

2.82

2.72

198

27

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

4.18

3.94

3.48

127

19

3 Year

5.24

5.02

5.02

159

42

10 Year

6.36

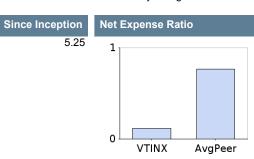
6.03

5.96

93

35

Total Fund Assets: \$16.77 bn Net Expense Ratio: 0.12 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

Year to Date

8.63

8.55

8.63

195

55

1 Year

6.54

5.90

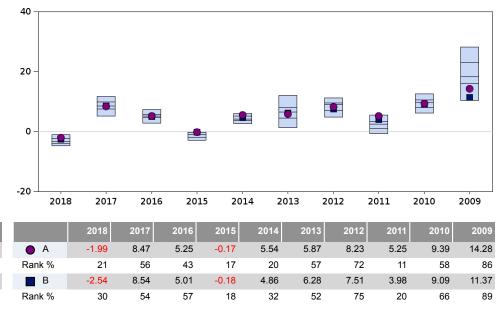
5.89

184

30

	QTD	YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Ο Α	2.97	8.63	6.54	5.24	4.18	6.36
Rank %	27	55	30	42	19	35
B	2.82	8.55	5.90	5.02	3.94	6.03
Rank %	50	59	49	54	30	55

Returns for Calendar Years

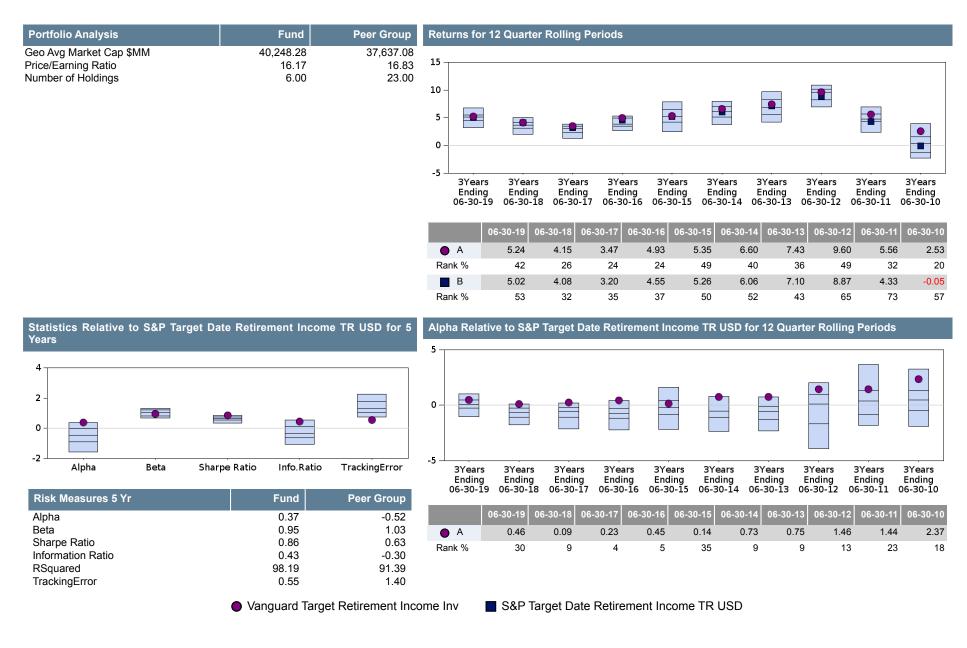


Vanguard Target Retirement Income Inv

S&P Target Date Retirement Income TR USD



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement Income Inv





Lansing Board of Water & Light 401(a) Plans VT Retirement IncomeAdvantage

5 Year

4.48

3.94

3.48

10 Year

6.94

6.03

5.96

Ticker:

Fund

Peers

#Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date Retirement Benchmark: S&P Target Date Retirement Income TR USD Fund Inception Date: -

Last Quarter

3.01

2.82

2.72

198

21

Fund Manager: NA Manager Tenure: -Website: -

3 Year

6.94

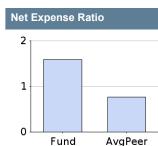
5.02

5.02

159

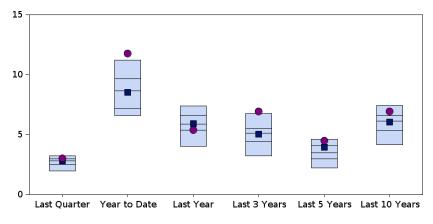
2

Total Fund Assets: -Net Expense Ratio: 1.59 Fund Family: VantageTrust



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	No
Prod Hist	NE
Manager Tenure	NE
AUM	NE
Alpha 5Yr	NE

Returns for Periods Ending 06/30/2019



Year to Date

11.77

8.55

8.63

195

1

1 Year

5.40

5.90

5.89

184

74

	QTD	YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
• A	3.01	11.77	5.40	6.94	4.48	6.94
Rank %	21	1	74	2	11	16
B	2.82	8.55	5.90	5.02	3.94	6.03
Rank %	50	59	49	54	30	55

VT Retirement IncomeAdvantage

S&P Target Date Retirement Income TR USD

127 93 11 16 1

Since Inception

Returns for Calendar Years

Insufficient data to display graph



Lansing Board of Water & Light 401(a) Plans VT Retirement IncomeAdvantage

Portfolio Analysis	Fund	Peer Group	Returns for 12 Quarter Rolling Periods
Geo Avg Market Cap \$MM	-	37,637.08	lass officient data to display analy
Price/Earning Ratio	-	16.83	insufficient data to display graph
lumber of Holdings	-	23.00	
Statistics Relative to S&P Target Date Retirement Income TR USD for 5 Years			Alpha Relative to S&P Target Date Retirement Income TR USD for 12 Quarter Rolling Periods
			Insufficient data to display graph
Insufficient data to display graph			······································
Insufficient data to display graph			
Insufficient data to display graph Risk Measures 5 Yr	Fund	Peer Group	
	Fund	Peer Group -0.52	
Risk Measures 5 Yr			
Risk Measures 5 Yr Alpha		-0.52	
Risk Measures 5 Yr Alpha Beta	:	-0.52 1.03	
Risk Measures 5 Yr Alpha Beta Sharpe Ratio	:	-0.52 1.03 0.63	
Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio		-0.52 1.03 0.63 -0.30	



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2015 Inv

Ticker: VTXVX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2015 Benchmark: S&P Target Date 2015 TR USD Fund Inception Date: 10-27-2003

Last Quarter

3.05

2.79

2.95

148

39

Year to Date

9.74

9.87

145

63

10.03

1 Year

6.48

5.77

5.99

135

36

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

3 Year

6.66

6.54

6.45

109

43

5 Year

4.89

4.77

4.32

79

29

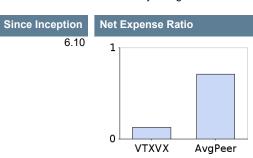
10 Year

8.33

7.89

7.72

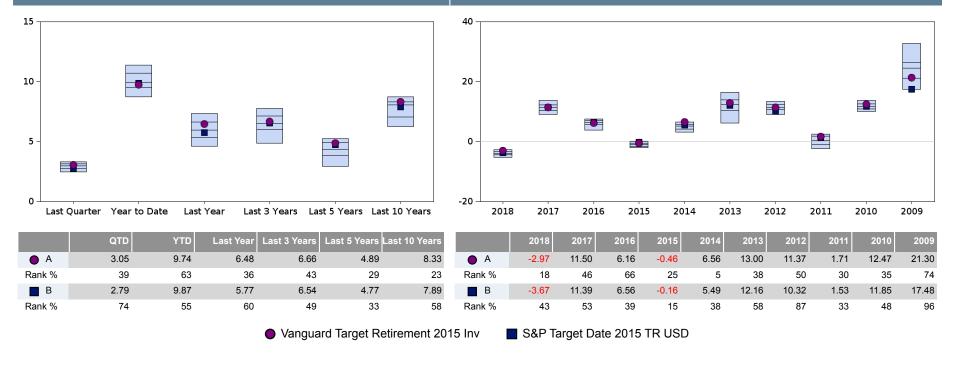
54 23 Total Fund Assets: \$15.77 bn Net Expense Ratio: 0.13 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

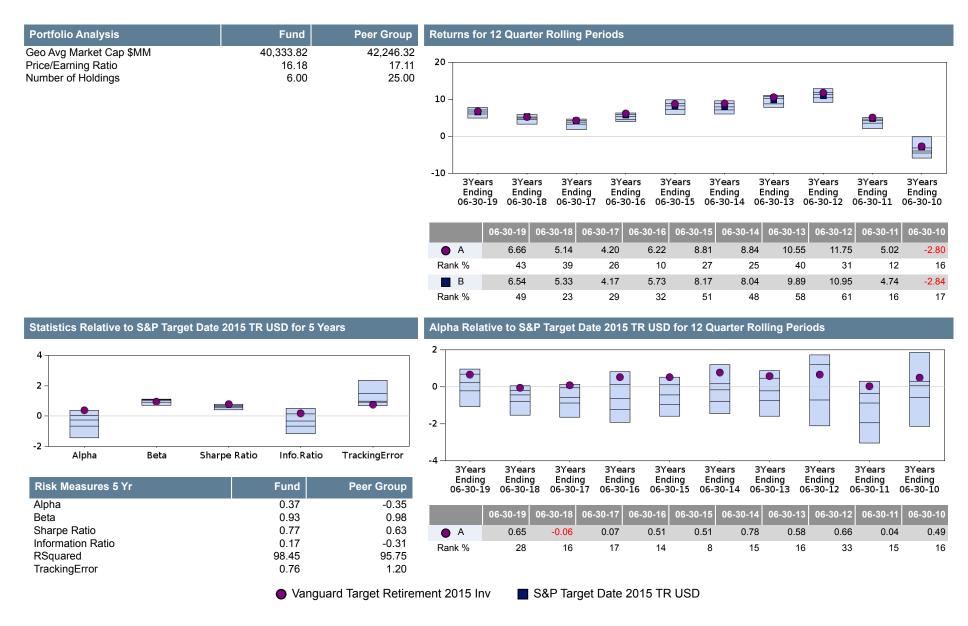
Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2015 Inv





Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2020 Inv

Ticker: VTWNX

Fund

Peers #Funds

Rank%

15

10

5

0

• A

Rank %

В

Rank %

Last Quarter Year to Date

QTD

3.24

28

2.88

76

Benchmark

Peer Group/Category: Morningstar Target-Date 2020 Benchmark: S&P Target Date 2020 TR USD Fund Inception Date: 06-07-2006

Last Quarter

3.24

2.88

3.02

259

28

Year to Date

11.32

10.54

10.67

256

33

1 Year

6.53

5.78

5.96

245

30

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

3 Year

7.82

7.28

6.89

204

22

5 Year

5.55

5.15

4.52

163

8

10 Year

9.15

8.66

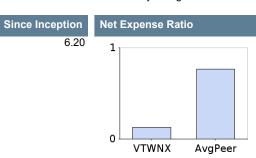
8.08

101

13

Returns for Calendar Years

Total Fund Assets: \$32.91 bn Net Expense Ratio: 0.13 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

40 20

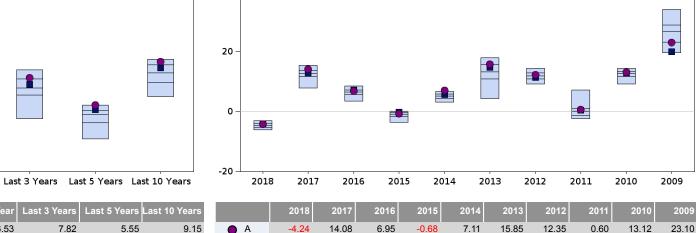
Last 3 Years

7.82

7.28

22

39



42

17

-0.19

24

34

14.76

1

5.67

37

40

59

11.48

36

38

0.58

41

48

12.93

Vanguard Target Retirement 2020 Inv

5.55

5.15

23

8

13

38

8.66

S&P Target Date 2020 TR USD

36

7.22

26

17

50

12.80

Last Year

Last Year

6.53

30

59

5.78

YTD

11.32

10.54

33

62

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Rank %

В

Rank %

43

38

-4.16

77

95

19.95



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2020 Inv

Portfolio Analysis	Fund	Peer Group	Returns for 12	2 Quarter I	Rolling Pe	eriods						
Geo Avg Market Cap \$MM	40,250.30	41,217.94	20									
Price/Earning Ratio Number of Holdings	16.17 6.00	16.97 25.00	20									
			10 -									
					_							
			o									
			-									•
			-10			,						
			3Years Ending	3Years Ending	3Years Ending	3Years Ending	3Years Ending		3Years Ending	3Years Ending	3Years Ending	3Years Ending
				06-30-18			06-30-1					06-30-10
				-30-19 06-	-30-18 06-:	30-17 06-3	80-16 06-3	0-15 06-30	06-30	-13 06-30-12	06-30-11	06-30-10
			• A	7.82	6.08	4.85				.49 12.17		-4.12
			Rank %	23	13	7	6	15		25 32		33
			В	7.28	5.91	4.58	6.19	9.39 8	8.88 11	.05 11.75	4.72	-4.13
			Rank %	39	21	18	20	35	38	39 56	27	34
Statistics Relative to S&P Target Date	2020 TR USD for 5 Yea	rs	Alpha Relative	e to S&P T	arget Dat	e 2020 TR	USD for	12 Quarter	Rolling P	eriods		
Clanence relative to call ranget Date			5		algot bat				rtening i	onouo		
4			5									
2 -												
	_		o – 🗖					•				
0			0									
-2 ⊥ Alpha Beta Shar	pe Ratio Info Ratio	TrackingError	-5									
			3Years Ending									
Risk Measures 5 Yr	Fund	Peer Group	06-30-19			06-30-16	06-30-15		06-30-13			06-30-10
Alpha Beta	0.27 1.03	-0.34 0.94	06	-30-19 06-	-30-18 06-3	30-17 06-3	30-16 06-3	0-15 06-30	0-14 06-30	-13 06-30-12	06-30-11	06-30-10
Sharpe Ratio	0.72	0.61	• A	0.33	0.01	0.16	0.44	0.64 (0.91 0	.58 0.54	-0.14	0.41
Information Ratio	0.67 99.25	-0.35 94.71	Rank %	31	17	14	18	15	20	29 51	25	35
RSquared TrackingError	0.60	1.45										
-		d Target Retiren	ant 2020 Inv	– 68	P Target	Data 202		П				
	uanyuar			3 0	a laiyet		0 11 03					



Ticker: VTTVX

Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2025 Inv

Peer Group/Category: Morningstar Target-Date 2025 Fund Manager: William Coleman Total Fund Assets: \$43.56 bn Pass Benchmark: S&P Target Date 2025 TR USD Manager Tenure: 6.33 Years Net Expense Ratio: 0.13 Criteria Criteria Fund Inception Date: 10-27-2003 Website: www.vanguard.com Fund Family: Vanguard Return 1Yr Yes Last Quarter Year to Date 5 Year 10 Year Since Inception Net Expense Ratio 1 Year 3 Year Return 5Yr Yes Fund 3.35 12.46 6.61 8.69 5.94 9.79 6.72 1 Expense Ratio Yes 2.99 11.61 5.70 8.09 5.52 9.33 Benchmark Peers 3.16 11.87 5.99 7.93 5.00 8.96 Prod Hist Yes #Funds 242 239 228 186 149 80 31 26 28 26 6 16 Rank% Manager Tenure Yes AUM Yes Ω Alpha 5Yr Yes VTTVX AvgPeer **Returns for Calendar Years** Returns for Periods Ending 06/30/2019 15 40 10 20 • -0-5 0 0 -20 0

Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years

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	QTD	YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Ο Α	3.35	12.46	6.61	8.69	5.94	9.79
Rank %	31	26	28	26	6	16
В	2.99	11.61	5.70	8.09	5.52	9.33
Rank %	76	69	63	49	25	44

S&P Target Date 2025 TR USD

2016

2017

15.94

14.55

22

63

2015

2016

7.48

31

7.82

17

2014

2015

-0.85

-0.25

36

16

2013

7.17

5.56

47

4

2012

2012

13.29

12.51

45

67

2013

18.14

17.03

31

42

2011

2011

-0.37

29

28

-0.28

2010

2010

13.84

13.82

36

42

2009

2009

24.81 76

22.03

92

2017

2018

-5.15

-5.02

43

38

2018

A

Rank %

В



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2025 Inv

Portfolio Analysis	Fund	Peer Group	Returns for 7	2 Quarter	Rolling Pe	eriods						
Geo Avg Market Cap \$MM	40,249.45	41,536.28	20									
Price/Earning Ratio Number of Holdings	16.17 5.00	17.03 26.00	20									
, , , , , , , , , , , , , , , , , , ,			10 -									
			0									
			10									
			-10 3Years Ending 06-30-1		3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	Ending	3Years Ending 06-30-13	3Years Ending 06-30-12	3Years Ending 06-30-11	3Years Ending 06-30-10
			C	6-30-19 06-	-30-18 06-	30-17 06-3	80-16 06-3	0-15 06-30	0-14 06-30-	13 06-30-12	06-30-11	06-30-10
			• A	8.69	6.68	5.18	7.04 1	11.18 10	0.42 12.	.34 12.67	4.35	-5.48
			Rank %	26	17	9	6	26		33 34		33
			B Rank %	8.09 49	6.59 21	4.85 26	6.48 1 21	0.36 9 47	9.60 12. 37	.03 12.35 38 40		- <mark>5.30</mark> 31
			INDIA /0	49	21	20	21	47	57	50 40	20	51
Statistics Relative to S&P Target Date	2025 TR USD for 5 Year	S	Alpha Relati	ve to S&P T	larget Dat	e 2025 TR	USD for 7	12 Quarter	Rolling P	eriods		
		Tura lána Ganan	2 0 -2 -								•	•
Alpha Beta Shari	pe Ratio Info.Ratio	TrackingError	-4 3Years	3Years	3Years	3Years	3Years	3Years	3Years	3Years	3Years	3Years
Risk Measures 5 Yr	Fund	Peer Group	Ending 06-30-19	Ending 06-30-18	Ending 06-30-17	Ending 06-30-16	Ending 06-30-15	Ending 06-30-14	Ending 06-30-13	Ending 06-30-12 (Ending 06-30-11 (Ending 06-30-10
Alpha Beta Sharpe Ratio Information Ratio RSquared TrackingError	0.30 1.02 0.69 0.63 99.28 0.66	-0.40 0.98 0.59 -0.33 97.25 1.31	A Rank %	06-30-19 06- 0.40 35	-30-18 06- -0.07 14		0-16 06-3 0.40 14		0.89 0.	13 06-30-12 48 0.47 23 36	-0.34	06-30-10 0.24 45
	Vanguaro	I Target Retirem	nent 2025 Inv	S 8	P Target	Date 202	5 TR US	D				



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2030 Inv

Ticker: VTHRX

Fund

Peers #Funds

Rank%

Ο Α

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Target-Date 2030 Benchmark: S&P Target Date 2030 TR USD Fund Inception Date: 06-07-2006

Last Quarter

3.41

3.09

3.24

248

32

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

3 Year

9.39

8.82

8.75

194

34

5 Year

6.22

5.89

5.44

153

18

10 Year

10.35

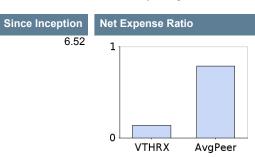
9.91

9.42

91

18

Total Fund Assets: \$38.40 bn Net Expense Ratio: 0.14 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

3.41

3.09

32

75

15 10 -**__** 5 0 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year Last 3 Years Last 5 Years Last 10 Years QTD YTD Last Year

6.42

32

5.55

60

9.39

8.82

34

51

Year to Date

13.27

12.78

12.98

245

39

1 Year

6.42

5.55

5.86

234

32

Returns for Calendar Years



Vanguard Target Retirement 2030 Inv

6.22

5.89

18

33

S&P Target Date 2030 TR USD

13.27

12.78

39

67



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2030 Inv

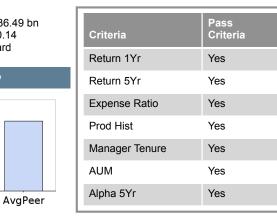
Portfolio Analysis	Fund	Peer Group	Returns for '	12 Quarter	Rolling P	eriods						
Geo Avg Market Cap \$MM	40,246.40	40,468.81										
Price/Earning Ratio Number of Holdings	16.16 5.00	16.98 24.00	20									
Number of Holdings	5.00	24.00						_				
			10 -	_		_						
			0									
			-10									
			3Years		3Years	3Years	3Years				3Years	3Years
			Ending 06-30-1	Ending 9 06-30-18	Ending 06-30-1	Ending 7 06-30-10		Ending 5 06-30-14		9 Ending 3 06-30-12	Ending 06-30-11	Ending 06-30-10
				_	_	_	_	_				
			C	06-30-19 06	-30-18 06	-30-17 06-	30-16 06-3	30-15 06-3	0-14 06-3	0-13 06-30-12	2 06-30-11	06-30-10
			• A	9.39	7.19	5.42				3.23 13.09		-6.82
			Rank %	34	26	17	10	21	20	28 34		
			B	8.82	7.23	5.16				2.82 12.74		
			Rank %	51	23	34	23	42	37	37 5	1 21	26
Statistics Relative to S&P Target Date 2	2030 TR USD for 5 Yea	rs	Alpha Relati	ve to S&P ⁻	Target Dat	te 2030 TF	R USD for	12 Quarte	r Rolling	Periods		
			5									
4			-									
2 -					_							
			0								•	
-2	· · · · ·											
Alpha Beta Sharp	e Ratio Info.Ratio	TrackingError	-5									
			3Years Ending	3Years Ending	3Years Ending	3Years Ending	3Years Ending	3Years Ending	3Years Ending		3Years Ending	3Years Ending
Risk Measures 5 Yr	Fund	Peer Group			06-30-17	06-30-Ĭ6	06-30-Ĭ5		06-30-13	3 06-30-12	06-30-Ĭ1	06-30-ĬO
Alpha	0.27	-0.35		06-30-19 06	-30-18 06	-30-17 06-	30-16 06-3	30-15 06-3	0-14 06-3	0-13 06-30-12	2 06-30-11	06-30-10
Beta Sharpe Ratio	1.01 0.66	0.99 0.58	• A	0.59	-0.24	0.09	0.26			0.48 0.37		0.12
Information Ratio	0.45	-0.24	Rank %	32	19	13	14	18	24	29 42		
RSquared	99.24	96.48	INCLUX /0	52	13	15	17	10	27	23 42	_ 50	-0
TrackingError	0.74	1.50										
	Vanguar	d Target Retiren	nent 2030 Inv	S 8	&P Target	Date 203	30 TR US	D				



Ticker: VTTHX

Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2035 Inv

Peer Group/Category: Morningstar Target-Date 2035 Fund Manager: William Coleman Total Fund Assets: \$36.49 bn Benchmark: S&P Target Date 2035 TR USD Manager Tenure: 6.33 Years Net Expense Ratio: 0.14 Fund Inception Date: 10-27-2003 Website: www.vanguard.com Fund Family: Vanguard Last Quarter Year to Date 3 Year 5 Year 10 Year Since Inception Net Expense Ratio 1 Year 3.47 14.03 6.27 10.11 6.49 10.88 7.31 Fund 1 3.18 13.78 5.36 9.50 6.23 10.39 Benchmark 3.31 14.02 5.71 9.66 5.80 10.07 Peers #Funds 237 234 223 181 144 75 33 52 31 19 13 Rank% 34



2012

2012

15.16

14.12

42

72

0

2011

2011

-2.24

-1.71

24

16

Returns for Periods Ending 06/30/2019

20 40 20 10 0 -20 0 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years 2018 2017 2016 2015 2014 2013 Last Year Last 5 Years Last 10 Years Last 3 Years QTD YTD Last Year 2018 2017 2016 2015 2013 • A 3.47 14.03 6.27 10.11 6.49 10.88 A -6.58 19.12 8.26 -1.26 7.24 22.82 33 52 31 34 27 Rank % 19 13 Rank % 33 36 39 43 9 В 3.18 13.78 5.36 9.50 6.23 В 10.39 -6.88 17.78 8.85 -0.35 5.69 20.84 Rank % 73 64 61 58 31 38 Rank % 48 77 14 17 49 54

Vanguard Target Retirement 2035 Inv

S&P Target Date 2035 TR USD

VTTHX

Returns for Calendar Years

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2009

2009

28.17

24.99

69

91

0

2010

2010

15.14

15.02

31

39



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2035 Inv

Portfolio Analysis	Fund	Peer Group	Returns fo	r 12 Quarter	Rolling Pe	eriods						
Geo Avg Market Cap \$MM	40,246.14	40,308.17	20									
Price/Earning Ratio Number of Holdings	16.16 5.00	17.03 24.00	20						_			
			10 -									
			0									
			-10	rs 3Years	3Years	3Years	3Years	3Years	3Years	3Years	3Years	3Years
			Endi		Ending	Ending	Ending	Ending	Ending	Ending 06-30-12 (Ending	Ending
			06-50	-19 06-50-16	5 06-30-17	06-30-16	06-30-1	5 06-50-14	+ 06-30-13	06-30-12	06-30-11	06-30-10
				06-30-19 06	-30-18 06-	-30-17 06-3	30-16 06-3	30-15 06-30	0-14 06-30-13	8 06-30-12	06-30-11	06-30-10
			• A	10.11	7.66	5.66	7.50	13.21 1 ⁻	1.75 14.05		3.96	-7.66
			Rank %	35	30	23	9	24	18 25			31
			B Rank %	9.50 57	7.83 22	5.47 33	7.07 21	12.08 10 53	0.77 13.44 39 37		4.05 22	-7.36 25
			Rank 70	01	22	00	21	00	00 01	00	22	20
Statistics Relative to S&P Target Date	2035 TR LISD for 5 Vea	re	Alpha Bala	tive to SPD.	Torgot Dot	0 2025 TD		12 Ouartos		iodo		
	2000 111 000 101 0 100	15	Арпа кета	live to Sar	Target Dat	Le 2000 TR			Rolling Per	lous		
2		13			Target Dat	le 2033 TK			r Rolling Per	ious		
, end			2	live to Sar	Target Dat	Le 2000 TK						
2											•	•
2			2								•	•
2			2								•	
			2 0 -2 -								•	
2 0 -2 Alpha Beta Shar			2 0 -2 -4 -3 Year	3Years	3Years	3Years	3Years	• 3Years	• 3Years	3Years		3Years
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr	pe Ratio Info.Ratio	TrackingError Peer Group	2 0 -2 -4 -3Year Ending	3Years	3Years Ending		3Years Ending	3Years Ending	3Years Ending	3Years Ending	Ending	
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha	pe Ratio Info.Ratio	TrackingError Peer Group -0.47	2 0 -2 -4 -3Year Ending	3Years Ending 9 06-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14	3Years Ending 06-30-13 0	3Years Ending 6-30-12 0	Ending 6-30-11 (3Years Ending 06-30-10
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr	pe Ratio Info.Ratio Fund 0.20 1.01 0.63	TrackingError Peer Group	2 0 -2 -4 -3Year Ending 06-30-3	3Years Ending 9 06-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14 30-15 06-30	3Years Ending 06-30-13 0	3Years Ending 6-30-12 0 06-30-12	Ending 6-30-11 (3Years Ending
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio	Pe Ratio Info.Ratio Fund 0.20 1.01 0.63 0.29	TrackingError Peer Group -0.47 1.01 0.56 -0.28	2 0 -2 -4 -3Year Ending	3Years Ending 9 06-30-18 06-30-19 06	3Years Ending 06-30-17 5-30-18 06-	3Years Ending 06-30-16	3Years Ending 06-30-15 30-16 06-3	3Years Ending 06-30-14 30-15 06-30	3Years Ending 06-30-13 0	3Years Ending 6-30-12 0 06-30-12 7 0.04	Ending 6-30-11 (06-30-11	3Years Ending 06-30-10
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio	pe Ratio Info.Ratio Fund 0.20 1.01 0.63	TrackingError Peer Group -0.47 1.01 0.56	-2 - -4 -3Years Ending 06-30-3	3Years Ending 9 06-30-18 06-30-19 06 0.74	3Years Ending 06-30-17 5-30-18 06- -0.49	3Years Ending 06-30-16 -30-17 06-3 -0.10	3Years Ending 06-30-15 30-16 06-1 0.06	3Years Ending 06-30-14 30-15 06-30	3Years Ending 06-30-13 0 0-14 06-30-13 0.67 0.27	3Years Ending 6-30-12 0 06-30-12 7 0.04	Ending 6-30-11 0 06-30-11 -0.16	3Years Ending 06-30-10 06-30-10 0.20
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio RSquared	Pe Ratio Info.Ratio	TrackingError Peer Group -0.47 1.01 0.56 -0.28 97.93	2 0 -2 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4	3Years Ending 9 06-30-18 06-30-19 06 0.74 28	3Years Ending 06-30-17 -0.49 28	3Years Ending 06-30-16 -30-17 06-3 -0.10	3Years Ending 06-30-15 30-16 06-1 0.06 11	3Years Ending 06-30-14 30-15 06-30 0.56 0 22	3Years Ending 06-30-13 0 0-14 06-30-13 0.67 0.27	3Years Ending 6-30-12 0 06-30-12 7 0.04	Ending 6-30-11 0 06-30-11 -0.16	3Years Ending 06-30-10 06-30-10 0.20



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2040 Inv

Ticker: VFORX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2040 Benchmark: S&P Target Date 2040 TR USD Fund Inception Date: 06-07-2006

Last Quarter

3.46

3.27

3.32

247

36

Year to Date

14.79

14.45

14.69

244

48

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

6.72

6.47

6.01

152

22

10 Year

11.17

10.73

10.21

91

15

3 Year

10.79

10.00

10.04

193

27

1 Year

6.00

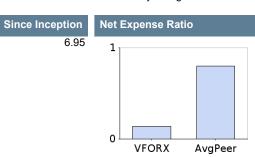
5.26

5.48

233

33

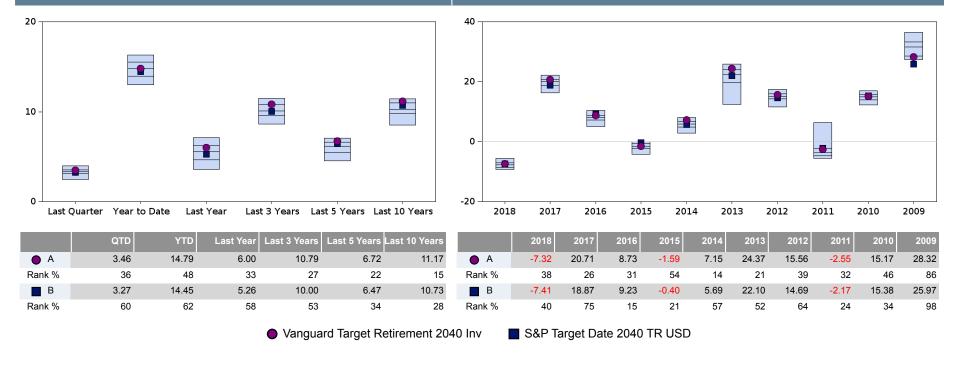
Total Fund Assets: \$28.47 bn Net Expense Ratio: 0.14 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

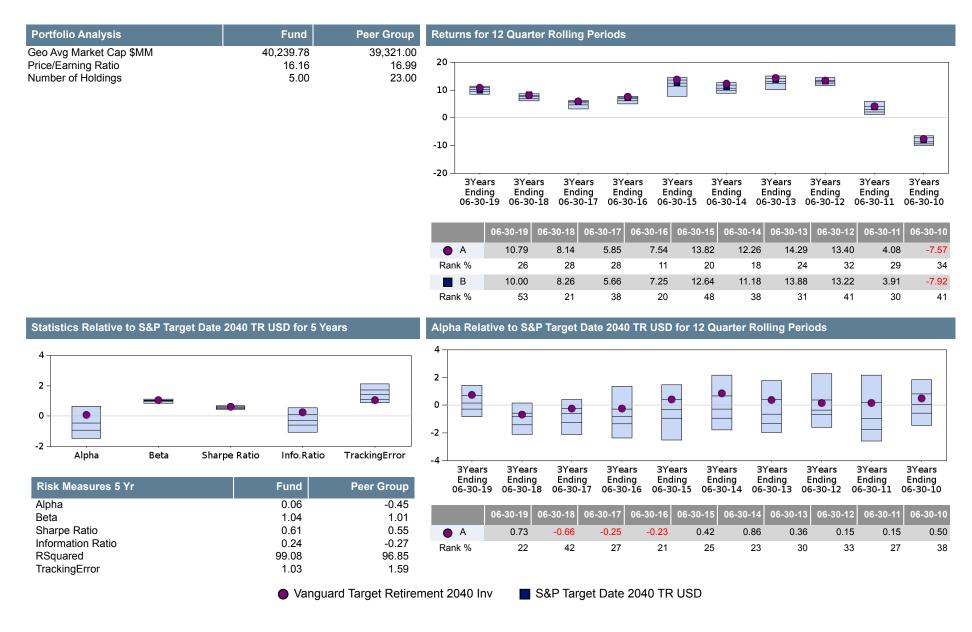
Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2040 Inv





Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2045 Inv

Ticker: VTIVX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2045 Benchmark: S&P Target Date 2045 TR USD Fund Inception Date: 10-27-2003

Last Quarter

3.51

3.32

3.38

237

37

Year to Date

15.39

14.78

15.29

234

47

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

6.86

6.61

6.17

144

19

10 Year

11.24

10.94

10.54

74

13

3 Year

11.05

10.32

10.51

181

28

1 Year

5.90

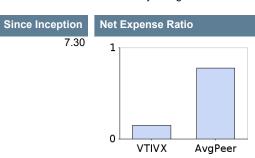
5.15

5.42

223

33

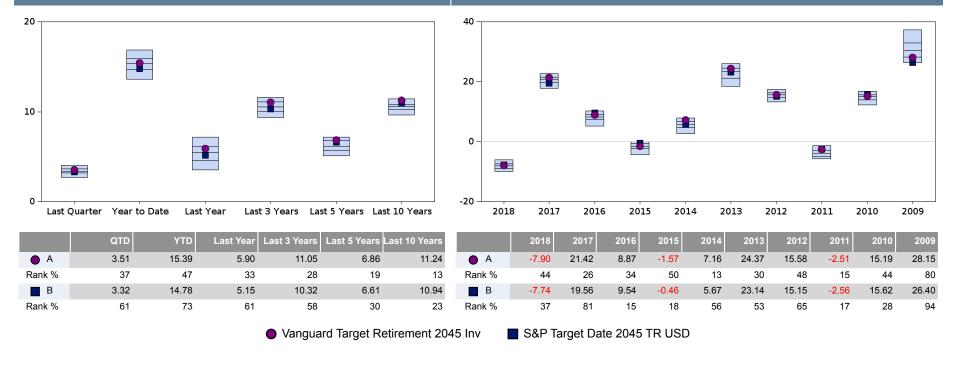
Total Fund Assets: \$26.14 bn Net Expense Ratio: 0.15 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

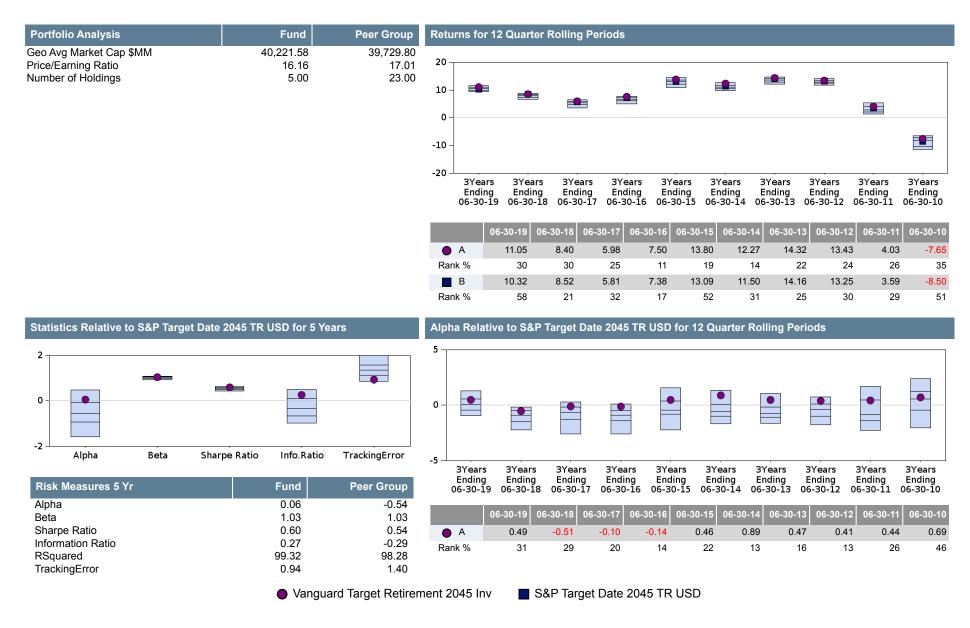
Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2045 Inv





Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2050 Inv

Ticker: VFIFX

Fund

Peers #Funds

Rank%

20

10

Ο Α

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Target-Date 2050 Benchmark: S&P Target Date 2050 TR USD Fund Inception Date: 06-07-2006

Last Quarter

3.47

3.32

3.37

247

39

Year to Date

15.38

14.97

15.44

244

56

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

6.85

6.73

6.22

152

24

10 Year

11.23

11.10

10.48

73

15

3 Year

11.03

10.61

10.47

193

33

1 Year

5.86

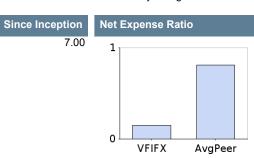
5.03

5.31

233

37

Total Fund Assets: \$18.85 bn Net Expense Ratio: 0.15 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

2009

2009

28.31

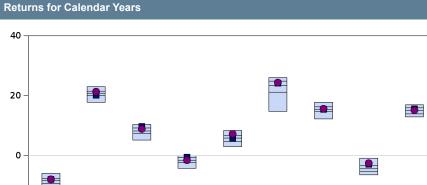
26.40

86

99

Returns for Periods Ending 06/30/2019

-20



2014

2015

-1.58

-0.47

55

21

2013

7.18

5.69

16

62

2012

2012

15.58

15.49

49

52

2013

24.34

24.13

33

34

2011

2011

-2.54

-2.87

18

22

2010

2010

15.20

15.62

48

35



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3.47 15.38 5.86 11.03 6.85 11.23 A 39 56 37 33 24 15 Rank % 3.32 14.97 5.03 10.61 6.73 В 11.10 60 71 60 48 33 22 Rank %

S&P Target Date 2050 TR USD

2016

2017

21.39

20.18

37

71

2015

2016

8.85

36

9.74

14

Vanguard Target Retirement 2050 Inv

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2017

2018

-7.90

-7.94

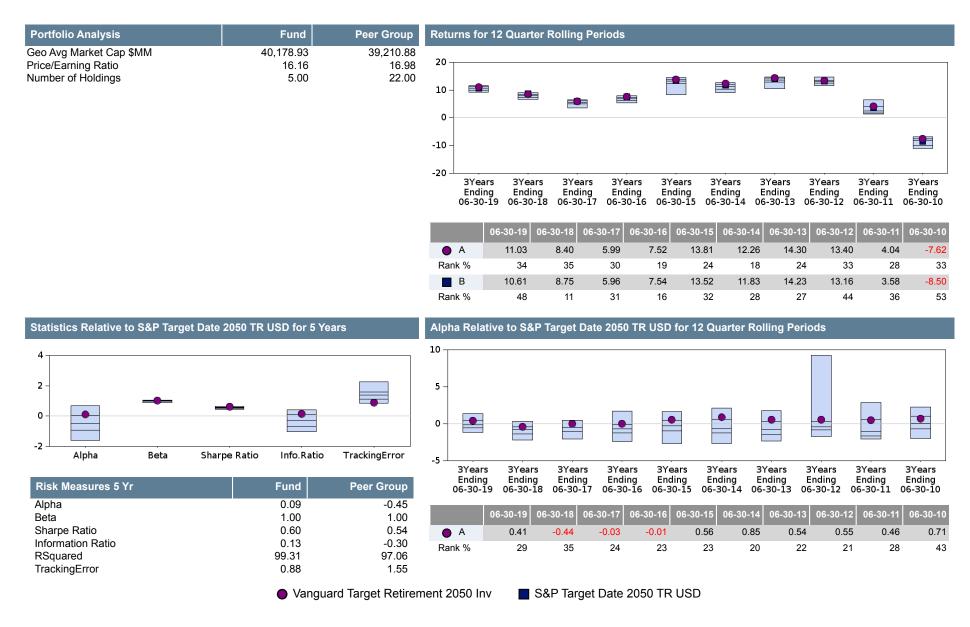
38

39

2018



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2050 Inv





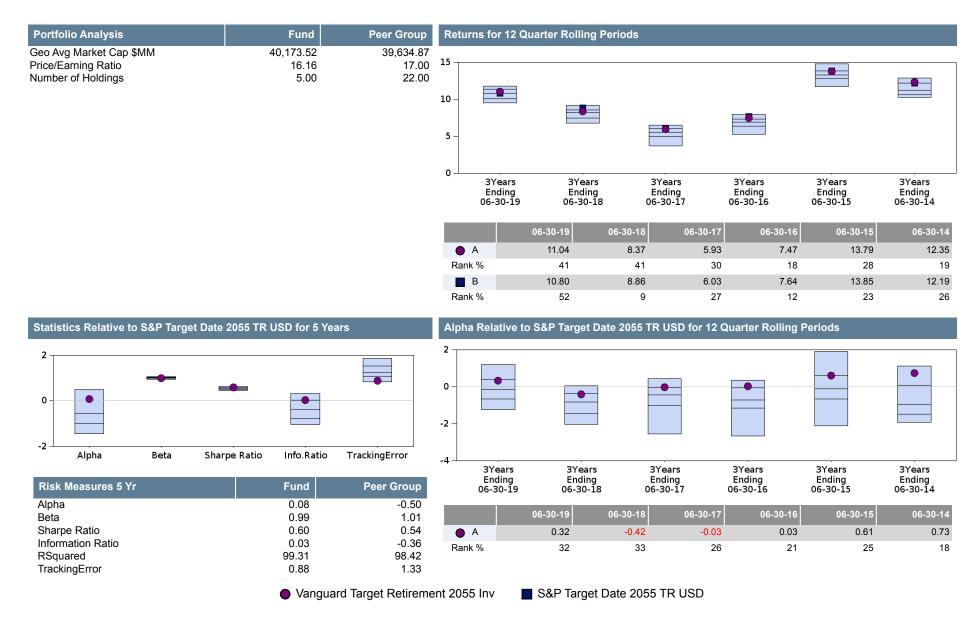
Ticker: VFFVX

Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2055 Inv

Peer Group/Category: Morningstar Target-Date 2055 Fund Manager: William Coleman Total Fund Assets: \$9.70 bn Pass Benchmark: S&P Target Date 2055 TR USD Manager Tenure: 6.33 Years Net Expense Ratio: 0.15 Criteria Criteria Fund Inception Date: 08-18-2010 Website: www.vanguard.com Fund Family: Vanguard Return 1Yr Yes Last Quarter Year to Date 3 Year 5 Year 10 Year Since Inception Net Expense Ratio 1 Year Return 5Yr Yes Fund 3.48 15.38 5.88 11.04 6.82 10.80 1 Expense Ratio Yes 11.24 3.34 15.02 5.03 10.80 6.79 Benchmark Peers 3.40 15.60 5.30 10.71 6.29 10.74 Prod Hist Yes #Funds 238 235 224 180 137 13 43 62 34 40 27 Rank% Manager Tenure Yes AUM Yes Ω Alpha 5Yr Yes VFFVX AvgPeer Returns for Periods Ending 06/30/2019 **Returns for Calendar Years** 20 40 -0-20 10 0 0 -20 Year to Date Last Year Last 3 Years Last 5 Years 2018 2017 2016 2015 2014 2013 2012 2011 Last Quarter Last Year Last 3 Years Last 5 Years 2018 2016 2015 2013 2012 YTD 2011 • A 3.48 15.38 5.88 11.04 6.82 • A -7.89 21.38 8.88 -1.72 7.19 24.33 15.58 -2.27 43 62 34 40 27 Rank % 37 48 35 55 31 52 Rank % 16 1 3.34 15.02 5.03 10.80 -7.97 20.48 9.94 -0.54 5.64 24.96 15.81 -2.87 **B** 6.79 B Rank % 61 77 61 52 30 Rank % 40 72 8 22 57 23 37 7 Vanguard Target Retirement 2055 Inv S&P Target Date 2055 TR USD



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2055 Inv





Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2060 Inv

Ticker: VTTSX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2060+ Benchmark: S&P Target Date 2055 TR USD Fund Inception Date: 01-19-2012

Last Quarter

3.48

3.34

3.47

230

49

Year to Date

15.36

15.02

15.82

218

74

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

6.81

6.79

6.47

15

42

10 Year

11.24

0

3 Year

11.03

10.80

10.88

119

49

1 Year

5.86

5.03

5.44

207

41

Total Fund Assets: \$4.08 bn Net Expense Ratio: 0.15 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

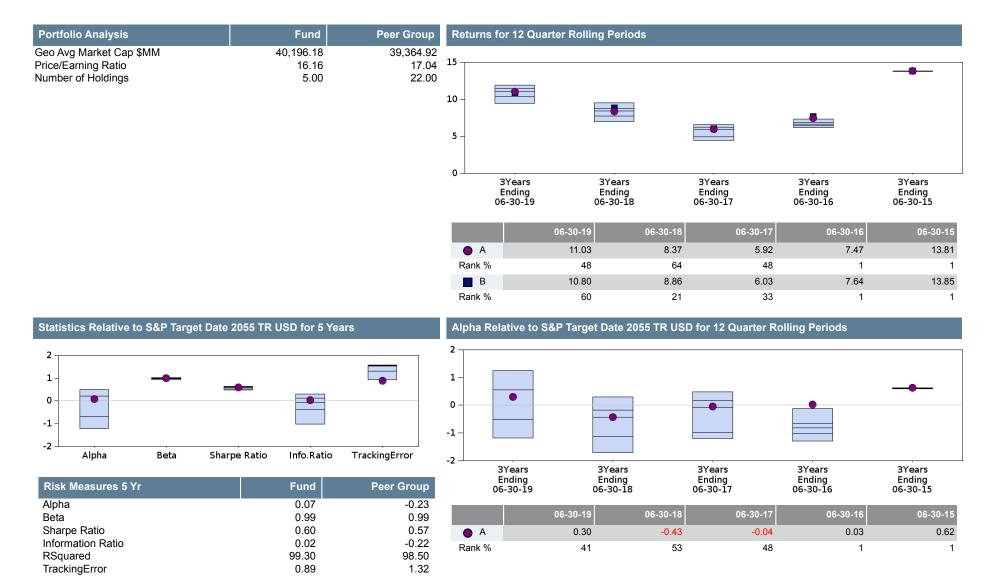
Returns for Periods Ending 06/30/2019



Returns for Calendar Years



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2060 Inv



Vanguard Target Retirement 2060 Inv

S&P Target Date 2055 TR USD



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2065 Inv

Ticker: VLXVX Fund Manager: William Coleman Peer Group/Category: Morningstar Target-Date 2060+ Total Fund Assets: \$365.15 MM Pass Benchmark: S&P Target Date 2055 TR USD Manager Tenure: 1.91 Years Net Expense Ratio: 0.15 Criteria Criteria Fund Inception Date: 07-12-2017 Website: www.vanguard.com Fund Family: Vanguard Return 1Yr Yes Last Quarter Year to Date 3 Year 5 Year 10 Year Since Inception Net Expense Ratio 1 Year Return 5Yr NE 3.52 15.40 5.84 7.29 Fund 1 Expense Ratio Yes 3.34 15.02 5.03 10.80 6.79 11.24 Benchmark Peers 3.47 15.82 5.44 10.88 6.47 Prod Hist No #Funds 230 218 207 119 15 0 71 Rank% 44 43 Manager Tenure No AUM Yes Ω Alpha 5Yr NE VLXVX AvgPeer Returns for Periods Ending 06/30/2019 **Returns for Calendar Years** 20 -6 10 -8 -10 0 -12 Year to Date Last Year 2018 Last Quarter Last Year 2018 QTD YTD • A 3.52 15.40 5.84 • A -7.95 44 71 43 39 Rank % Rank % B 3.34 15.02 В 5.03 -7.97 Rank % 65 86 67 Rank % 41 Vanguard Target Retirement 2065 Inv S&P Target Date 2055 TR USD



Lansing Board of Water & Light 401(a) Plans Vanguard Target Retirement 2065 Inv

Portfolio Analysis	Fund	Peer Group	Returns for 12 Quarter Rolling Periods
ieo Avg Market Cap \$MM rice/Earning Ratio lumber of Holdings	40,240.56 16.16 5.00	39,364.92 17.04 22.00	Insufficient data to display graph
Statistics Relative to S&P Target Date 3	2055 TR USD for 5 Years		Alpha Relative to S&P Target Date 2055 TR USD for 12 Quarter Rolling Periods
Insufficient data to display graph			Insufficient data to display graph
Insufficient data to display graph Risk Measures 5 Yr	Fund	Peer Group	Insufficient data to display graph
Risk Measures 5 Yr	Fund	Peer Group -0.23	Insufficient data to display graph
		•	Insufficient data to display graph
Risk Measures 5 Yr Alpha	-	-0.23	Insufficient data to display graph
Risk Measures 5 Yr Alpha Beta	:	-0.23 0.99	Insufficient data to display graph
Risk Measures 5 Yr Alpha Beta Sharpe Ratio	-	-0.23 0.99 0.57	Insufficient data to display graph

Consolidated Disclosures & Definitions

Disclaimer

The information in this report is general information only and is not intended to constitute specific legal, accounting, financial or tax advice. It is provided to assist in evaluating investments relating to your retirement plan and the general investment conditions of the marketplace, but it is not intended as the sole source upon which a determination is made.

Important Disclosure Information: This report has been prepared with data believed reliable, but no representation is made as to the data's accuracy or completion. Past performance does not guarantee future results. Current performance may be lower or higher than the past performance quoted. The investment return and principal value will fluctuate and shares when sold may be worth more or less than the original cost.

RISKS:

Investing in mutual funds, which are intended as long-term investments, involves risk, including the possible loss of principal. It is important to understand that certain types of securities and/or investment strategies employed by mutual funds may expose an investor to additional inherent risks. Investments in foreign securities are subject to special additional risks, including currency risk, political risk, and risk associated with varying accounting standards. Funds invested in emerging markets may accentuate these risks. Sector funds (those funds that invest exclusively in one sector or industry), such as technology or real estate stocks, are subject to substantial volatility due to adverse political, economic, or other developments and may carry additional risk resulting from lack of industry diversification. Non-diversified funds, which invest more of their assets in a single issuer, may experience substantial volatility due to the increased concentration of investments. Funds that invest in small or midcapitalization companies may experience a greater degree of market volatility, and potential for business failure, than those of large-capitalization stocks and are riskier investments. Bond funds have the same interest rate, inflation, and credit risks as associated with the underlying bonds owned by the fund. Generally, the value of bond funds rises when prevailing interest rates fall and falls when interest rates rise. Funds that invest in lower-rated debt securities, commonly referred to as high yield or junk **bonds**, have additional risks and may be subject to greater market fluctuations and risk of loss of income and principal (relative to higher-rated securities), due to the lower credit quality of the securities and increased risk of default. Bear in mind that higher return potential is accompanied by higher risk.

Although diversification is not a guarantee against loss, it is an effective strategy to help you manage risk. There is no guarantee that a diversified portfolio will outperform a non-diversified portfolio. There are no assurances that your investment objectives will be achieved.

IMPORTANT DISCLOSURES:

You should consider the investment objectives, risks, and charges and expenses of the investment options carefully before investing. The prospectuses and other comparable documents contain this and other information about the investment options. They may be obtained by calling your record keeper. You should read the prospectuses and/or other comparable documents carefully before investing.

The performance data contained herein represents past performance, which does not guarantee future results. Investment returns and principal value will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or high than the performance data quoted. Please refer to the website listed for each fund to obtain performance data current to the most recent month-end. All total returns for the funds listed assume the reinvestment of all dividends and capital gains distributions at net asset value when paid. Furthermore, the total returns do not reflect the deduction of any initial sales charges as these charges are not applicable to eligible retirement plans. Had these sales charges been deducted, results would have been lower than shown. In certain circumstances, a back-end sales charge may be assessed upon redemption of shares within a particular timeframe. Please refer to the prospectus and/or statement of additional information for specific details. Please note that there are other charges and expenses that apply to the investment options, such as management fees, which are reflected in their net investment return.

An investment in a money market fund is neither insured nor guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although a money market fund seeks to maintain the value of your investment at \$1.00 per share, it is possible to lose money by investing in a money market fund.

The stable value funds identified are collective trust funds and are not mutual funds; consequently, they are not registered with or regulated by the U.S. Securities and Exchange Commission. They are typically operated and offered by Banks and/or Trust Companies or their affiliates and are regulated by banking regulators. For a copy of the trust's "Summary Information Booklet," please call your record keeper.

The analysis was prepared solely to help in reviewing your plan. Accordingly, it may be incomplete or contain other departures from generally accepted accounting principles and should not be used to obtain credit or for any other purpose. We have not performed an audit, review, or compilation engagement in accordance with standards established by the American Institute of Certified Public Accountants

Performance shown for separate accounts prior to the first fully funded quarter, as reflected in the report, are composite performances of the separate account managers. Composite performance has been adjusted based on the management fee of each separate account currently in place within the portfolio.

EXPLANATION OF ABBREVIATED TERMS:

Cat = Category Idx = Benchmark Index Mstar Rating = Morningstar Rating Tot Ret = Total Return AnnIzd = Annualized Exp Ratio = Expense Ratio Std Dev = Standard Deviation AUM = Assets Under Management Ticker = Ticker Symbol Pref = Preferred Stocks Conv = Convertible Bonds Mgr = Manager

Morningstar Category Classification Definitions:

U.S. Stock:

Large Value, LCV

Large-value portfolios invest primarily in large U.S. companies that are less expensive or growing more slowly than other large-cap stocks with a market cap greater than \$10 billion. Value is defined as low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Large Blend, LCB

Large-blend portfolios are fairly representative of the overall U.S. stock market in size, growth rates, and price with a market cap greater than \$10 billion. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Large Growth, LCG

Large-growth portfolios invest in big U.S. companies that are projected to grow faster than other large-cap stocks with a market cap greater than \$10 billion. Growth is defined as fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

Mid-Cap Value, MCV

The U.S. mid-cap range for market cap typically falls between \$2 - \$10 billion. Value is defined as low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Mid-Cap Blend, MCB

The U.S. mid-cap range for market cap typically falls between \$2 - \$10 billion. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Mid-Cap Growth, MCG

The U.S. mid-cap range for market cap typically falls between \$2 - \$10 billion. Growth is defined as fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

Small Value, SCV

Small-value portfolios invest in small U.S. companies with valuations and growth rates below other small-cap peers with a market cap of less than \$2 billion. Value is defined as low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Small Blend, SCB

Small-blend portfolios invest in small U.S. companies with a market cap of less than \$2 billion. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Small Growth, SCG

Small-growth portfolios invest in small U.S. companies that focus on faster-growing companies with a market cap less than \$2 billion. Growth is defined based on fast

panies with a market cap less than \$2 billion. Growth is defined

growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

Specialty-Communications, SC

Specialty-communications portfolios concentrate on telecommunications and media companies of various kinds.

Specialty-Energy, SE

Specialty-energy portfolios concentrate on stocks of energy companies. Most concentrate on companies that produce or refine oil and gas, oilfield service and equipment companies, and pipeline operators.

Specialty-Financial, SF

Specialty-financial portfolios seek capital appreciation by investing primarily in equity securities of financial-services companies, including banks, brokerage firms, insurance companies, and consumer credit providers.

Specialty-Health, SH

Specialty-health portfolios focus on the medical and health-care industries. Most invest in a range of companies, including pharmaceutical and medical-device makers to HMOs, hospitals, biotechnology and nursing homes.

Specialty-Natural Resources, SN

Specialty-natural resources portfolios focus on commodity-based industries such as energy, chemicals, minerals, and forest products.

Specialty-Precious Metals, SP

Specialty-precious metals portfolios focus on mining stocks, though some do own small amounts of gold bullion. Most portfolios concentrate on gold-mining stocks, but some have significant exposure to silver-, platinum-, and base-metal-mining stocks as well.

Specialty-Real Estate, SR

Specialty-real estate portfolios invest primarily in real-estate investment trusts (REITs) of various types. REITs are companies that develop and manage real-estate properties.

Specialty-Technology, ST

Specialty-technology portfolios focus on high-tech businesses such as computer, semiconductor, software, networking, and Internet stocks.

Specialty-Utilities, SU

Specialty-utilities portfolios seek capital appreciation by investing primarily in equity securities of public utilities including electric, gas, and telephone-service providers.

Balanced:

Convertibles, CV

Convertible bond portfolios are designed to offer some of the capital-appreciation potential of stock portfolios while also supplying some of the safety and yield of bond portfolios. To do so, they focus on convertible bonds and convertible preferred stocks. Convertible bonds allow investors to convert the bonds into shares of stock.

Conservative Allocation, CA

Conservative-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold smaller positions in stocks than moderate-allocation portfolios.

Moderate Allocation, MA

Moderate-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold larger positions in stocks than conservative-allocation portfolios.

World Allocation, IH

World-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. While these portfolios do explore the whole world, most of them focus on the U.S., Canada, Japan, and the larger markets in Europe.

Target-Date Portfolios

Target-date portfolios provide a diversified exposure to stocks, bonds, and cash for those investors who have a specific date for retirement or another goal. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Over time, management adjusts the allocation among asset classes to more conservative mixes as the target date approaches. Morningstar divides target-date funds into the following categories:

Retirement Income, Target-Date 2000, 2005, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055

International Stock:

Foreign Large Value, FV

Foreign large-value portfolios invest mainly in large international stocks that are less expensive or growing more slowly than other large-cap stocks. Most of these portfolios divide their assets among a dozen or more developed markets. These portfolios primarily invest in stocks that have a market cap greater than \$10 billion. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Foreign Large Blend, FB

Foreign large-blend portfolios invest in a variety of large international stocks. Most of these portfolios divide their assets among a dozen or more developed markets. These portfolios primarily invest in stocks that have a market cap greater than \$10 billion. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Foreign Large Growth, FG

Foreign large-growth portfolios invest mainly in large international stocks that focus on high-priced growth stocks. Most of these portfolios divide their assets among a dozen or more developed markets. These portfolios primarily invest in stocks that have market cap greater than \$10 billion. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

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Foreign Small/Mid Value, FA

Foreign small-/mid-value portfolios invest in international stocks that are smaller and less expensive than other stocks. These portfolios primarily invest in stocks that have a market cap less than \$10 billion and divide their assets among a dozen or more developed markets. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Foreign Small/Mid Growth, FR

Foreign small-/mid-growth portfolios invest in international stocks that are smaller, growing faster, and higher-priced than other stocks. These portfolios primarily invest in stocks that have a market cap less than \$10 billion and divider their assets among a dozen or more developed markets. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

World Stock, WS

World-stock portfolios have few geographical limitations. It is common for these portfolios to invest the majority of their assets in the U.S., Europe, and Japan, with the remainder divided among the globe's smaller markets.

Diversified Emerging Mkts, EM

Diversified emerging-markets portfolios tend to divide their assets among 20 or more nations, although they tend to focus on the emerging markets of Asia and Latin America rather than on those of the Middle East, Africa, or Europe.

Pacific/Asia ex-Japan Stk, PJ

Pacific/Asia ex-Japan stock portfolios cover a wide geographic range. Most of these portfolios focus on export-oriented nations such as Hong Kong, Singapore, Taiwan, and Korea.

Taxable Bond:

Long Government, GL

Long-government portfolios have at least 90% of their bond holdings invested in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. They are not risk free, though. Because these portfolios have durations of more than six years (or, if duration is unavailable, average effective maturities greater than 10 years), they are more sensitive to interest rates, and thus riskier, than portfolios that have shorter durations.

Intermediate Government, GI

Intermediate-government portfolios have at least 90% of their bond holdings in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. These portfolios have durations between 3.5 and six years (or, if duration is unavailable, average effective maturities between four and 10 years).

Consequently, the group's performance—and its level of volatility--tends to fall between that of the short government and long government bond categories.

Short Government, GS

Short-government portfolios have at least 90% of their bond holdings in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. These portfolios have durations between one and 3.5 years (or, if duration is unavailable, average effective maturities between one and four years), so they have relatively less sensitivity to interest rates, and thus low risk potential.

Inflation-Protected Bond, IP

Inflation-protected bond portfolios invest primarily in debt securities that adjust their principal values in line with the rate of inflation. These bonds can be issued by any organization, but the U.S. Treasury is currently the largest issuer for these types of securities.

Long-Term Bond, CL

Long-term bond portfolios invest primarily in corporate and other investment-grade U.S. fixed income issues and have durations of more than six years (or, if duration is unavailable, average effective maturities greater than 10 years). Due to their long durations, these portfolios are exposed to greater interest rate risk.

Intermediate-Term Bond, CI

Intermediate-term bond portfolios invest primarily in corporate and other investmentgrade U.S. fixed-income issues and have durations of 3.5 to six years (or, if duration is unavailable, average effective maturities of four to 10 years). These portfolios are less sensitive to interest rates, and therefore less volatile, than portfolios that have longer durations.

Short-Term Bond, CS

Short-term bond portfolios invest primarily in corporate and other investment-grade U.S. fixed income issues and have durations of one to 3.5 years (or, if duration is unavailable, average effective maturities of one to four years). These portfolios are attractive to fairly conservative investors, because they are less sensitive to interest rates than portfolios with longer durations.

Ultrashort Bond, UB

Ultrashort bond portfolios invest primarily in investment-grade U.S. fixed-income issues and have durations of less than one year (or, if duration is unavailable, average effective maturities of less than one year). This category can include corporate or government ultrashort bond portfolios, but it excludes international, convertible, multisector, and high yield bond portfolios. Due to their focus on bonds with very short durations, these portfolios offer minimal interest rate sensitivity and therefore low risk and total return potential.

Stable Value, SVF

Stable-value portfolios seek to provide income while preventing price fluctuations. The most common stable-value portfolios invest in a diversified portfolio of bonds and enter into wrapper agreements with financial companies to guarantee against fluctuations in their share prices. These wrapper agreements typically provide price stability on a day-

High Yield Bond, HY

High-yield bond portfolios concentrate on lower-quality bonds, which are riskier than those of higher-quality companies. These portfolios generally offer higher yields than other types of portfolios, but they are also more vulnerable to economic and credit risk. These portfolios primarily invest in U.S. high-income debt securities where at least 65% or more of bond assets are not rated or are rated by a major agency such as Standard & Poor's or Moody's at the level of BB (considered speculative for taxable bonds) and below.

Multisector Bond, MU

Multisector bond portfolios seek income by diversifying their assets among several fixed income sectors, usually U.S. government obligations, U.S. corporate bonds, foreign bonds, and high-yield U.S. debt securities. These portfolios typically hold 35% to 65% of bond assets insecurities that are not rated or are rated by a major agency such as Standard & Poor's or Moody's at the level of BB (considered speculative for taxable bonds) and below.

World Bond, IB

World bond portfolios invest 40% or more of their assets in foreign bonds. Some world bond portfolios follow a conservative approach, favoring high-quality bonds from developed markets. Others are more adventurous, and own some lower-quality bonds from developed or emerging markets. Some portfolios invest exclusively outside the U.S., while others regularly invest in both U.S. and non-U.S. bonds.

Money Market:

Taxable Money Market, TM

These portfolios invest in short-term money market securities in order to provide a level of current income that is consistent with the preservation of capital.

Index Definitions:

Fixed Income Indices

Bloomberg Barclays Aggregate Index covers the U.S. investment-grade fixed-rate bond market, including government and credit securities, agency mortgage pass-through securities, asset-backed securities, and commercial mortgage-based securities.

Bloomberg Barclays U.S. Government Bond Index is comprised of both the Treasury and Agency indices.

Bloomberg Barclays 1-3 Year Government Bond Index includes the Treasury Bond and the Agency Bond indices that have maturities of one to three years.

Bloomberg Barclays 1-3 Year Government/Credit Index includes the Bloomberg Barclays Government and Bloomberg Barclays Corporate Bond indices that have maturities of one to three years.

Bloomberg Barclays U.S. Credit Bond Index is comprised of publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements.

Bloomberg Barclays Intermediate U.S. Government/Credit Index is composed of all bonds covered by the Bloomberg Barclays U.S. Government Bond and U.S. Credit Indices with maturities between 1 and 9.99 years. The index includes all publicly issued, fixed rate, nonconvertible investment-grade corporate debt. Issues are rated at least Baa by Moody's Investors Service or BBB by S&P, if unrated by Moody's. Collateralized Mortgage Obligations (CMOs) are not included, Total return comprises price appreciation/ depreciation and income as a percentage of the original investment.

Bloomberg Barclays Long Term Government/Credit Index includes the Government and Corporate indices that have maturities of 10 years or longer.

Bloomberg Barclays Mortgage Backed Securities Index covers the mortgage-backed passthrough securities of Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

Bloomberg Barclays High Yield Index is a weighted index comprised of all fixed income securities having a maximum quality rating of Ba1 (including defaulted issues), a minimum outstanding amount of \$150 million and at least one year to maturity.

Bloomberg Barclays Global Aggregate Bond Index provides a broadbased measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices, The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian Government securities, and USD investment grade 144A securities.

Bloomberg Barclays Capital U.S. TIPS Index measures the performance of inflation-protected bonds.

Bloomberg Barclays Capital U.S. Universal Index measures represents the union of the U.S. Aggregate Index, U.S. Corporate High-Yield, Investment Grade 144A Index, Eurodollar Index, U.S. Emerging Markets Index, and the non-ERISA eligible portion of the CMBS Index. The index covers USD- denominated, taxable bonds that are rated either investment-grade or below investment-grade.

Bloomberg Barclays Intermediate Government Bond Index includes those indices found in the Bloomberg Barclays Government Index that have a maturity of one to three years.

Bloomberg Barclays Long Term Government Bond Index includes those indexes found in the Bloomberg Barclays Government index, which has a maturity of 10 years or more. The returns we publish for the index are total returns, which include reinvestment of dividends.

Morgan Stanley Capital International (MSCI) Indices

MSCI EAFE Index is a weighted, unmanaged index of the performance of 1,100 securities in major overseas stock markets of Europe Australasia, and the Far East.

MSCI EAFE Growth Index includes those firms in the MSCI EAFE Index with higher Price/Book Value (P/B ratios relative to their respective MSCI country index.

MSCI EAFE Value Index includes those firms in the MSCI EAFE Index with lower Price/Book Value (P/BV) ratios relative to their respective MSCI country index.

MSCI EAFE Small Cap Index includes small cap firms in the MSCI EAFE Index

MSCI World Index is a weighted, unmanaged index of the performance of approximately 1,500 securities listed on the stock exchanges of the U.S., Europe, Australia, and the Far East.

MSCI Pacific ex. Japan index measures the performance of stock markets in Australia, Hong Kong, New Zealand, and Singapore, and Malaysia.

MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The MSCI Emerging Markets Index consisted of the following 26 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela.

MSCI AC Pacific Index is a free float-adjusted market capitalization index that is designed to measure the equity market performance in the Pacific region. The MSCI AC Pacific Index consisted of the following 12 emerging and developed market countries: Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, and Thailand.

Dow Jones Indices

Dow Jones Aggressive Portfolio Index is a benchmark designed for asset allocation strategists who are willing to take 100% of the risk of the global securities market.

Dow Jones Conservative Portfolio Index is a benchmark designed for asset allocation strategists who are willing to take 20% of the risk of the global securities market.

Dow Jones Moderate Portfolio Index is a benchmark designed for asset allocation strategists who are willing to take 60% of the risk of the global securities market.

Dow Jones U.S. Industry Indexes are the benchmarks designed for specific sectors which represent approximately 95% of U.S. market capitalization. The indexes are: **DJ U.S. Basic Material Index, Consumer Goods Index, Consumer Services Index, Financials Index, Heath Care Index, Industrials Index, Oil & Gas Index, Technology Index, Telecommunications Index, and the Utilities Index.**

Russell Style Indices

The **Russell 3000**® **Index** measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 90% of

the investable U.S. equity market. Subsets of this index include the **Russell 2000**® **Index**, which measures the performance of the 2,000 smallest companies in the Russell 3000, the **Russell 1000**® Index, which measures the performance of the 1,000 largest companies in the Russell 3000. The Russell 2000 Value Index, Russell 1000 Value Index and Russell Midcap Value Index measure the performance of those companies in the respective broad index with lower price-to-book ratios and lower forecasted growth values. The Russell 2000 Growth Index, Russell 1000 Growth Index and Russell Midcap Value the performance of those companies in the respective broad index with lower price-to-book ratios and lower forecasted growth values.

Standard & Poor's Indices

The **Standard & Poor's 500** is an unmanaged capitalization-weighted index of 500 stocks generally representative of large companies (as measured by market capitalization). The **Standard & Poor's Midcap 400**® and **Small cap 600**® are unmanaged indices generally representative of mid-sized and small companies respectively. Investors cannot invest directly in an index.

S&P Target Date Indexes are representative of the investment opportunity available to investors through existing target date funds with asset class exposures driven by a survey of such funds for each particular target date. The series is comprised of the following nine indicies: **S&P Target Date Retirement Income, 2010, 2015, 2020, 2025, 2030, 2035, 2040, and 2045+**.

S&P Goldman Sachs Commodity Indexes contains composite index of commodity sectors which represents a broadly diversified, unleveraged, long-only position in commodity futures. The indexes includes: Energy, Industrial Metals, Precious Metals, Agriculture, Livestock, and Natural Resources.

S&P 1500 Energy Index is an unmanaged capitalization-weighted index comprising of companies in the Energy sector as determined by S&P.

Glossary:

12b-1 Fees

A fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund.

Annualized Returns

Returns for periods longer than one year are expressed as "annualized returns." This is equivalent to the compound rate of return which, over a certain period of time, would produce a fund's total return over that same period.

Alpha

Alpha is a measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. A positive alpha

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figure indicates the portfolio has performed better than its beta would predict. In contrast, a negative alpha indicates the portfolio has underperformed, given the expectations established by beta.

Asset Allocation

Income and capital appreciation are dual goals for funds in this objective. Managers often use a flexible combination of stocks, bonds, and cash; some, but not all, shift assets frequently based on analysis of business-cycle trends.

Benchmark

Benchmark is a measure to compare the fund's returns with to judge its performance.

Beta

A measure of a fund's sensitivity to market movements. The beta of the market is 1.00 by definition. Morningstar calculates beta by comparing a fund's excess return over Treasury bills to the market's excess return over Treasury bills, so a beta of 1.10 shows that the fund has performed 10% better than its benchmark index in up markets and 10% worse in down markets, assuming all other factors remain constant. Conversely, a beta of 0.85 indicates that the fund's excess return is expected to perform 15% worse than the market's excess return during up markets and 15% better during down markets.

Category Average

Category averages measure how a category performed over a specific time period while correcting for the effects of survivorship-bias, recently-incepted funds and category changes.

Category Percentile Ranking

The fund's total-return percentile rank relative to all funds that have the same Morningstar Category. The highest (or most favorable) percentile rank is 1 and the lowest (or least favorable) percentile rank is 100. The top-performing fund in a category will always receive a rank of 1.

Expense Ratio

The percentage of fund assets paid for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Sales charges are not included in the expense ratio.

Plan Inception Date

Date that the fund, regardless of share class, was added to the Plan.

Inception Date

Date the fund commenced operations.

Index Funds

Index funds are funds that track a particular index and attempt to match its returns. While index funds typically have a much larger portfolio than a mutual fund, the index fund's management may study the index's movements to develop a representative sampling, and match sectors proportionately.

Information Ratio

The information ratio is a measure of the consistency of excess return. The ratio is calculated by taking the annualized excess return over a benchmark (numerator) and dividing it by the standard deviation of excess return (denominator).

Manager

The name of the individual or individuals who are employed by the advisor or subadvisor who are directly responsible for managing the fund's portfolio

Manager Tenure

The number of years that the current manager has been the portfolio manager of the fund. For funds with more than one manager, the average tenure is shown.

Median Market Cap

Median refers to the midpoint of the range numbers that are arranged in order of value (lowest to highest). The market cap is the company's value, determined by multiplying the current number of shares outstanding by the current stock price for one share.

Morningstar Category

The investment category assigned by Morningstar based on the underlying securities in each portfolio. Morningstar categories help make meaningful comparisons between funds

Morningstar Rating

Morningstar rates mutual funds from 1 to 5 stars based on how well they've performed (one being the lowest, 5 stars being the highest possible ranking) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive 5 stars and the bottom 10% receives 1 star. Funds are rated for up to three time periods-three, five-, and 10-years and these ratings are combined to produce an overall rating.

Price/Earnings Ratio

Ratio used to compare a company's current share price to its per share earnings. It is calculated by dividing the market value per share by the earnings per share.

R-squared

R-squared measures (on a scale of 0 to 100) the amount of movement of a fund's return that can be explained by that fund's benchmark. An R-squared of 100 means that all movements of a fund are completely explained by movements in the associated index (benchmark).

Redemption Fee

An annual amount charged when assets are withdrawn from some funds. Unlike deferred fees, however, some redemption fees go back into the fund itself, rather than into the fund company's pockets, and thus do not represent a net cost to shareholders.

Share Classes

Shares of the same fund that offer different shareholder rights and obligations, such as different fee and load charges. Common share classes are A (front-end load), B (deferred fees), C (no sales charge and a relatively high annual 12b-1 fee, such as 1.00%). Multi-class funds hold the same investment portfolio for all classes, and differ only in their surrounding fee structure.

Sharpe Ratio

The Sharpe Ratio is a risk-adjusted measure. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance. It can be used to

compare two portfolios directly on how much excess return each portfolio achieved for a certain level of risk.

Peer Benchmark

A proprietary tailored benchmark based on the average performance of appropriate peer groups. The weightings of each average peer group return varies over time to make it comparable to the weightings of the portfolio over the same periods. Comparing portfolio performance to this benchmark helps to assess performance against peers. The Benchmark was rebalanced quarterly.

Weighted Benchmark

A tailored benchmark constructed of a combination of investment indexes weighted based on the individual manager's allocations within the overall portfolio. Specific components of the Weighted Benchmark may include the Bloomberg Barclays Capital U.S. Aggregate Index, the Russell 3000 Index, and the MSCI EAFE Index. Other indexes may be included that PMFA feels appropriately represents the manager or peer group.

Time Weighted Return (TWR)

A method of calculating the return of an investment or portfolio that gives the same weight to time periods, regardless of cash flows into or out of the investment or portfolio. Because TWR eliminates or substantially reduces the impact of cash flows on a portfolio, it is the calculation that fairly compares the performance of the portfolio to another manager or index. However, certain underlying assumptions must be made relative to cash flows in calculating TWR that may result in nominal differences in calculated returns reported by different sources for a given period. Returns greater than 1 year are annualized.

Cumulative Return

The profit or loss, calculated as a percentage, on a given investment or portfolio of investments over a given period of time. Within the context of this report, cumulative return measures the return of the portfolio and broad index since inception through the date of this report.

Ticker

This symbol represents a fund's or a company's stock on an exchange. The ticker can be the most dependable way to identify a security, because it is less likely to change than a security name

Stable Value Disclosure

Some collective trusts engage in securities lending programs in an effort to add additional return for investors. Securities lending programs are associated with various risks, including those associated with collateral management and counterparties.

For Stable Value funds, fees include wrap fees, sub-advisor management fees, management fees, revenue sharing, and administrative fees. Stable Value funds may calculate performance differently depending on their use of sub-advisors and calculation methodology. Detailed performance calculations are available for each Stable Value fund upon request.

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Lansing Board of Water & Light 457(b) Deferred Compensation Plan

Investment Review

Advising Team: Plante Moran Financial Advisors pmfainstitutional@plantemoran.com

Second Quarter 2019



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Table Of Contents

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PMFA Market Perspectives - Quarterly Commentary Second Quarter 2019

"Be not afraid of growing slowly; be afraid only of standing still."

Chinese Proverb

Although the first report on second quarter GDP is still a few weeks away, all indications are that the economy slowed in recent months. Still, it is now a foregone conclusion that the economy has entered uncharted territory as the longest expansion in the U.S., having reached ten years last month. Even on the heels of this record run, the economy may be experiencing a slowdown in growth, but it is not standing still.

The signs of moderation in growth and inflation expectations have prompted a marked shift in tone from the Federal Reserve in recent months. Coming out of the June FOMC meeting, the Fed signaled that it was prepared to trim its benchmark policy rate as soon as July. Lower rates were almost out of the question even late last year, when both Fed forecasts and market expectations called for multiple rate hikes in 2019. That now appears to be off the table. Markets cheered Fed chair Jerome Powell's indication that the Fed will "act as appropriate to sustain the expansion," implying that risk assets have the Fed on their side.

The dovish shift in tone from policy makers helped to support equity market returns during the quarter, adding to the robust gains since the beginning of the year. U.S. stocks gained 4.1% in Q2, lifting YTD returns to 18.7%. Bonds also rallied, as long-term yields fell sharply, bringing Q2 performance for the Bloomberg Barclays Aggregate Bond Index to an impressive 3.1% (6.1% year to date).

A similar narrative has unfolded outside of the U.S., as economic growth abroad has also shown signs of slowing. Much like the Fed, global central banks have also turned increasingly dovish. The result? International equity markets also delivered solid performance, up 3.0% during the quarter, building on strong first-quarter gains to return 13.6% for the first half of the year. With global growth expected to rebound in the second half of the year (supported by more accommodative monetary policy), and valuations for international equities remaining attractive, we continue to believe international equities play a meaningful role in a well-diversified global portfolio.

Although equity markets delivered positive results during the quarter, those gains came with an uptick in volatility. Trade tensions escalated as the Trump administration threatened to impose further tariffs on several of the country's largest trading partners, most notably China. Stalled trade talks between the two countries resumed at the G20 summit in Japan in late June, with an apparent truce reached in the form of an agreement to temporarily hold off on imposing additional tariffs. Whether that creates an opening for negotiations to move forward constructively toward an eventual deal remains to be seen, but most believe that much work remains to be done and a near-term breakthrough is unlikely. The bottom line is that trade is likely to remain a source of uncertainty and potential volatility for some time. Still, any indications that progress is being made toward a new treaty would almost certainly provide a boost to investor sentiment and global equity performance.

After such a strong start to the year, many equity investors may be wondering whether the bull market still has steam. It's typically easy to identify what could go wrong (trade, geopolitics, slowing economic growth, etc.), but investors often find it more difficult to identify the many things that can go right. Any number of risks are unquestionably present today, but many catalysts for continued growth (strong labor market, supportive monetary policy, reasonable equity valuations, solid consumer spending/sentiment, etc.) are also present. As we noted in our Road Ahead commentary last December, there is a key distinction between slower growth and no growth. A broad swathe of data still indicates that the economy is growing.

It may be hard to be excited about slower growth, but – to paraphrase the Chinese proverb above – investors shouldn't fear it. Those who focus solely on the potential downside may be tempted to de-risk their portfolio. However, history has shown that pulling money out of the market at the wrong time can be costly, as the market typically produces positive returns, even in the latter stages of the economic cycle. While volatility tends to increase in late-cycle environments, investors would be well served to look through any volatility and make investment decisions within the context of their long-term goals and objectives, risk tolerance, targeted rate of return, and investment time horizon.

For a more detailed discussion around our current views, we encourage you to explore our ongoing thought leadership, by visiting the <u>"Wealth Management/Our Thinking</u>" section of our website, <u>plantemoran.com</u>. Access to these insights will also be delivered to you via our monthly "Learn, Lead, Legacy" email, which includes timely updates surrounding Wealth Management and Plante Moran. Please contact your relationship manager if you would like to subscribe.

Administrative Matters

We have provided this information regarding your account(s) based on sources we believe to be reliable and accurate. We urge you to take a moment to compare the account balances and positions contained in your report to those balances reflected on the statements that you receive directly from your account's custodian. Please contact us or the account custodian with any questions you may have. Also, please notify us promptly



PMFA Market Perspectives - Quarterly Commentary Second Quarter 2019

if you do not receive statements on all accounts from the custodian on at least a quarterly basis.

ADV Part 2A Offer

Included with this report is an updated Form ADV Part 2A Material Change page. Previously, we provided you with a complete copy of our Form ADV Part 2A that provided important information about our current organizational structure, breadth of services, the investment philosophy that we employ, and our fee structure. If you would like a copy of our current Form ADV Part 2A, please contact your relationship manager or send an email request to <u>dave.doyle@plantemoran.com</u>. You may also obtain a copy by visiting our website <u>plantemoran.com</u>. Additional information about PMFA is also available via the SEC's website <u>adviserinfo.sec.gov</u>. The SEC's website also provides information about any persons affiliated with PMFA who are registered as investment adviser representatives of PMFA.

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Very truly yours,

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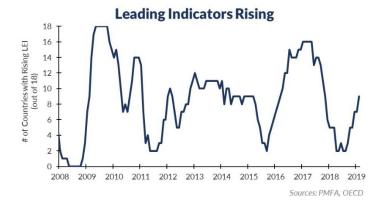
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PMFA Market Perspectives Second Quarter 2019

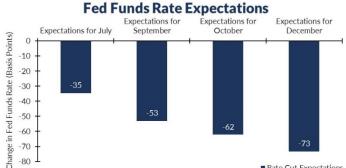
Is a pickup in global growth on the horizon?



Across the globe economic data has weakened over recent quarters, prompting concern amongst investors. Looking beyond the recent weakness, leading indicators, intended to forecast future economic activity, suggest growth is picking up in several countries. In fact, 9 of the 18 largest countries (as measured by GDP) have leading indicators that were rising as of April. This is coming off a recent low at the end of last summer, where only two countries had rising leading indicators. With this in mind, short-term recessionary concerns may be overblown.

Furthermore, easing trade tensions, the dovish shift from several central banks, and contained inflationary pressures should all be supportive as we look ahead. While global economic growth may have recently softened, a modest rebound could be on the horizon.

What will be the Fed's next move?



Rate Cut Expectations Expectations are the weighted average for the meeting as of 6/19/2019 Sources: PMFA, CME Group

The Federal Reserve's June announcement affirmed what the markets had anticipated: a potential reversal in its long-standing tightening bias may be close. The Fed's core message on the economy remained generally positive -sufficiently so for policymakers to conclude that rates should be left unchanged. Still, the acknowledgement of increased uncertainty was a meaningful shift, as were the updated projections indicating that nearly half of the central bank's policy making committee expect the need to cut rates before the end of the year.

Since the announcement, market expectations (via Fed funds futures) have moved to effectively reflect a 100% expectation for a July rate cut of at least a quarter-point and a nearly 70% probability that the Fed will trim by at least 0.75% this year. In May, that probability was only about 25%. The sharp reversal in sentiment has come amid increased trade tensions, more tepid growth expectations, and persistently low inflation.

Policymakers are hinting strongly at a rate cut, and market consensus is now overwhelmingly tilting in that direction. The question is whether the Fed's shift reflects a gloomier outlook or a preemptive move to avoid such a scenario.



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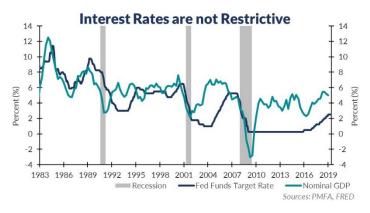


PAUL OLMSTEAD CIMA[®] Associate Senior Fixed Income Analyst



PMFA Market Perspectives Second Quarter 2019

What would a rate cut signal for the near-term economic outlook?



In response to recent softening in the economic outlook, the Federal Reserve has now clearly opened the door to cut its policy rate in an effort to stimulate the economy. In turn, investors may question what a rate cut may signal about the Fed's rationale for trimming rates and about the expansion's durability.

It's important to understand the rationale for any potential Fed easing in context. Growth has moderated, but the baseline view is for continued expansion. Recent recessions were preceded by Fed tightening that pushed short-term interest rates above the rate of nominal GDP growth. As illustrated above, that is far from the case today.

In the graph above, we would highlight two mid-cycle rate cuts of note in the 1990s. In 1995, the Fed eased following a 16-month period in which it had doubled its short-term policy rate and long-term yields had declined. An additional cut in 1998 was intended to provide stability in direct response to the Asian financial crisis. Following those cuts, nominal GDP accelerated by more than 1.5%, helping to extend an expansion that would go on to set a record for its length.

Can the Fed do it again? It increasingly appears that is what policymakers have in mind.

Could easy financial conditions help to moderate an economic slowdown?



Recent mixed economic data has stoked concerns among investors that growth is slowing and that recession risk has risen. As a result, the latest comments by the Fed have been noteworthy, as policymakers have indicated they may be willing to ease conditions by cutting interest rates if incoming data remains sluggish.

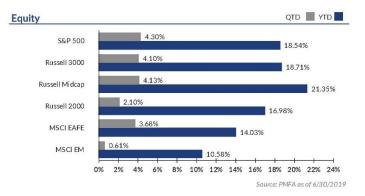
Even without a cut, financial conditions have already become more accommodative in recent months, as credit spreads and interest rates have broadly fallen. With financial conditions loosening, the environment could be (and typically has been) increasingly positive for risk assets, including equities. Additionally, if the Fed were to cut rates, conditions could be perceived as even more attractive, so long as economic data doesn't materially deteriorate. Historically, stocks have done well as financial conditions eased. Recently, financial markets have started to price in that potential, which also creates a potential risk should the Fed ultimately not deliver a rate reduction as expected.

The bottom line is that if economic data continues to disappoint, the probability of a Fed rate cut will remain high. Easy financial conditions combined with a willingness by the Fed to trim rates, if appropriate, could provide additional "insurance" to create a soft landing for the economy, extending the current expansion.



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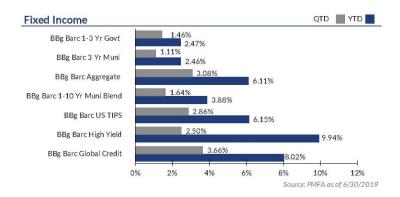
Equity performance (ended 6/30/19)



In spite of a volatile quarter, equities were up broadly over Q2, particularly in the U.S., with all major indices posting postitive returns. Markets are up notably since the beginning of the year, with the S&P 500 returning nearly 19% year to date.

The quarter started out on a strong note, with equity markets reaching record highs as strong earnings reports and solid economic data eased recession concerns. However, trade tensions between the U.S. and China heated up in early May causing markets to sell off. Stocks then saw a strong rebound in June as trade talks between the U.S. and China resumed, fueling hopes that tensions between the two countries may subside.

Fixed income performance (ended 6/30/19)



Fixed income markets also saw strong returns over the quarter, as long-term yelds fell significantly over the period providing a boost to bond prices. The Bloomberg Barclays Aggregate Index returned more than 3% over the period, bringing its total performance to 6.11% year to date.

Credit spreads tightened over the quarter as well, as investors continued to take on more risk, particularly in June. As a result, credit oriented sectors also saw strong performance, with the Bloomberg Barclays Global Credit Index rising 3.66% over the period. High yield bonds remain the strongest performing sector year to date, with a total return of nearly 10% as of the end of June.

Disclosures:

Past performance does not guarantee future results. All investments include risk and have the potential for loss as well as gain.

Data sources for peer group comparisons, returns, and standard statistical data are provided by the sources referenced and are based on data obtained from recognized statistical services or other sources believed to be reliable. However, some or all of the information has not been verified prior to the analysis, and we do not make any representations as to its accuracy or completeness. Any analysis nonfactual in nature constitutes only current opinions, which are subject to change. Benchmarks or indices are included for information purposes only to reflect the current market environment; no index is a directly tradable investment. There may be instances when consultant opinions regarding any fundamental or quantitative analysis may not agree.

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PMFA Market Perspectives Second Quarter 2019

	Trailing Returns as of June 30, 2019Quarter To DateYear To DateAnnualized Latest 1 YearAnnualized Latest 3Annualized Latest 5Annualized Latest 10 Years1.462.474.021.311.231.231.112.463.481.461.441.943.086.117.872.312.953.901.643.885.492.062.553.372.866.154.842.081.763.644.1018.718.9814.0210.1914.674.5021.4110.6017.8113.0216.133.6816.057.3410.197.3113.144.3018.5410.4214.1910.7114.705.2821.8410.1716.7413.9719.723.7216.1816.394.848.3912.83-2.8313.13-13.250.20-5.545.018.0017.246.3116.4210.5813.091.388.0712.9910.8210.6115.523.5721.3810.4312.469.2815.596.6627.1314.3426.2018.5318.576.3117.263.2010.385.4411.394.4919.0913.660.585.349.853.4814.7019.038.0510.0012.174.1321.357.8312.16							Calenda	r Year Retur	ns	
-			Latest 1	Latest 3	Latest 5	Latest 10	2018	2017	2016	2015	2014
Fixed Income											
Bloomberg Barclays 1-3 Yr Government	1.46	2.47	4.02	1.31	1.23	1.23	1.58	0.45	0.87	0.57	0.64
Bloomberg Barclays 3 Yr Municipal	1.11	2.46	3.48	1.46	1.44	1.94	1.76	1.56	0.08	1.18	1.22
Bloomberg Barclays U.S. Aggregate Bond	3.08	6.11	7.87	2.31	2.95	3.90	0.01	3.54	2.65	0.55	5.97
Bloomberg Barclays 1-10 Year Muni	1.64	3.88	5.49	2.06	2.55	3.37	1.64	3.49	-0.10	2.45	4.66
Bloomberg Barclays U.S. Treasury U.S. TIPS	2.86	6.15	4.84	2.08	1.76	3.64	-1.26	3.01	4.68	-1.44	3.64
Equity											
Russell 3000	4.10	18.71	8.98	14.02	10.19	14.67	-5.24	21.13	12.74	0.48	12.56
Russell 3000 Growth	4.50	21.41	10.60	17.81	13.02	16.13	-2.12	29.59	7.39	5.09	12.44
Russell 3000 Value	3.68	16.05	7.34	10.19	7.31	13.14	-8.58	13.19	18.40	-4.13	12.70
S&P 500	4.30	18.54	10.42	14.19	10.71	14.70	-4.38	21.83	11.96	1.38	13.69
S&P 500 Sec/Cons Disc	5.28	21.84	10.17	16.74	13.97	19.72	0.83	22.98	6.03	10.11	9.68
S&P 500 Sec/Cons Staples	3.72	16.18	16.39	4.84	8.39	12.83	-8.38	13.49	5.38	6.60	15.98
S&P 500 Sec/Energy	-2.83	13.13	-13.25	0.20	-5.54	5.01	-18.10	-1.01	27.36	-21.12	-7.78
S&P 500 Sec/Financials	8.00	17.24	6.31	16.42	10.58	13.09	-13.03	22.18	22.80	-1.53	15.20
S&P 500 Sec/Health Care	1.38	8.07	12.99	10.82	10.61	15.52	6.47	22.08	-2.69	6.89	25.34
S&P 500 Sec/Industrials	3.57	21.38	10.43	12.46	9.28	15.59	-13.29	21.03	18.86	-2.53	9.83
S&P 500 Sec/Information Technology	6.06	27.13	14.34	26.20	18.53	18.57	-0.29	38.83	13.85	5.92	20.12
S&P 500 Sec/Materials	6.31	17.26	3.20	10.38	5.44	11.39	-14.70	23.84	16.69	-8.38	6.91
S&P 500 Sec/Communication Services	4.49	19.09	13.66	0.58	5.34	9.85	-12.53	-1.25	23.49	3.40	2.99
S&P 500 Sec/Utilities	3.48	14.70	19.03	8.05	10.00	12.17	4.11	12.11	16.29	-4.85	28.98
Russell Mid Cap	4.13	21.35	7.83	12.16	8.63	15.16	-9.06	18.52	13.80	-2.44	13.22
Russell 2000	2.10	16.98	-3.31	12.30	7.06	13.45	-11.01	14.65	21.31	-4.41	4.89
MSCI EAFE	3.68	14.03	1.08	9.11	2.25	6.90	-13.79	25.03	1.00	-0.81	-4.90
MSCI ACWI Ex U.S.	2.98	13.60	1.29	9.39	2.16	6.54	-14.20	27.19	4.50	-5.66	-3.87
MSCI EAFE Local	2.80	13.68	2.17	9.80	5.85	8.35	-10.99	15.23	5.34	5.33	5.92
MSCIEM	0.61	10.58	1.21	10.66	2.49	5.81	-14.57	37.28	11.19	-14.92	-2.19
Alternatives											
Barclays High Yield	2.50	9.94	7.48	7.52	4.70	9.24	-2.08	7.50	17.13	-4.47	2.45
Barclays Global Credit	3.66	8.02	7.55	3.99	2.45	5.20	-3.29	9.19	5.43	-3.39	2.43
HFRX Global Hedge Fund	1.58	4.22	-1.95	2.12	-0.11	1.42	-6.72	5.99	2.50	-3.64	-0.58
Bloomberg Commodity TR	-1.19	5.06	-6.75	-2.18	-9.15	-3.74	-11.25	1.70	11.77	-24.66	-17.01

Source: PMFA

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Domestic Equity Investment Options

	Value	Blend	Growth
Large	JHancock Disciplined Value R6	Fidelity® 500 Index	Fidelity® Contrafund® MainStay Large Cap Growth I
Medium		Fidelity® Mid Cap Index JPMorgan Mid Cap Value R6	T. Rowe Price Instl Mid-Cap Equity Gr
Small	American Beacon Small Cap Value R6	Fidelity® Small Cap Index	AMG TimesSquare Small Cap Growth N

Fixed Income Investment Options

Money Market/Stable Value	Broad Fixed Income (Core)	Other Fixed Income (Non-Core)
Cash	PIMCO Total Return A	PIMCO Real Return Instl
Vantagepoint PLUS Fund R10	Fidelity® US Bond Index	PIMCO Income Instl

Other Investment Options

International/World Equity	Target Date	Other
Oakmark International Advisor Vanguard Total Intl Stock Index Admiral American Funds Europacific Growth R6 Vanguard International Growth Adm American Funds Capital World Gr&Inc R6	Vanguard Target Retirement Income Inv VT Retirement IncomeAdvantage Vanguard Target Retirement 2015 Inv Vanguard Target Retirement 2020 Inv Vanguard Target Retirement 2025 Inv Vanguard Target Retirement 2030 Inv Vanguard Target Retirement 2035 Inv Vanguard Target Retirement 2040 Inv Vanguard Target Retirement 2045 Inv Vanguard Target Retirement 2050 Inv Vanguard Target Retirement 2050 Inv Vanguard Target Retirement 2055 Inv Vanguard Target Retirement 2060 Inv Vanguard Target Retirement 2065 Inv	Fidelity® Balanced Nuveen Real Estate Securities I



Lansing Board of Water & Light 457(b) Deferred Compensation Plan **Investment Balances**

	Q2 20	19	Q1 20)19	Q4 2	018	Q3 2	018	
Fund	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Quarter Change
Cash	\$145,026	0.13%	\$117,057	0.11%	\$330,408	0.33%	\$295,172	0.27%	0.02%
Vantagepoint PLUS Fund R10	\$19,818,475	17.69%	\$19,156,204	17.41%	\$0	0.00%	\$0	0.00%	0.28%
Vantagepoint PLUS Fund R5	\$0	0.00%	\$0	0.00%	\$18,581,737	18.49%	\$18,797,081	16.96%	0.00%
PIMCO Total Return A	\$1,689,139	1.51%	\$1,848,158	1.68%	\$0	0.00%	\$0	0.00%	-0.17%
PIMCO Total Return Instl	\$0	0.00%	\$0	0.00%	\$3,648,820	3.63%	\$4,358,573	3.93%	0.00%
PIMCO Low Duration Instl	\$0	0.00%	\$0	0.00%	\$248,266	0.25%	\$246,008	0.22%	0.00%
Fidelity® US Bond Index	\$4,852,326	4.33%	\$4,339,332	3.94%	\$0	0.00%	\$0	0.00%	0.39%
Vanguard Total Bond Market Index Adm	\$0	0.00%	\$0	0.00%	\$2,959,128	2.94%	\$2,564,186	2.31%	0.00%
PIMCO Real Return Admin	\$0	0.00%	\$0	0.00%	\$1,326,275	1.32%	\$1,421,279	1.28%	0.00%
PIMCO Real Return Instl	\$1,347,768	1.20%	\$1,288,352	1.17%	\$0	0.00%	\$0	0.00%	0.03%
PIMCO Income Instl	\$1,157,019	1.03%	\$1,159,030	1.05%	\$0	0.00%	\$0	0.00%	-0.02%
Delaware High-Yield Opportunities In	\$0	0.00%	\$0	0.00%	\$974,278	0.97%	\$1,054,440	0.95%	0.00%
VT III Vantagepoint Model Port Cnsrv Gr	\$0	0.00%	\$0	0.00%	\$1,056,811	1.05%	\$1,112,617	1.00%	0.00%
Fidelity® Balanced	\$3,033,883	2.71%	\$2,894,884	2.63%	\$2,439,117	2.43%	\$0	0.00%	0.08%
Franklin Managed Income A	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$2,569,205	2.32%	0.00%
VT III Vantagepoint Model Port Trdtl Gr	\$0	0.00%	\$0	0.00%	\$3,875,178	3.86%	\$4,414,625	3.98%	0.00%
VT III Vantagepoint Model Port L-T Gr	\$0	0.00%	\$0	0.00%	\$6,371,041	6.34%	\$7,100,644	6.41%	0.00%
BlackRock Global Allocation Inv A	\$0	0.00%	\$0	0.00%	\$133,093	0.13%	\$142,469	0.13%	0.00%
AllianzGI NFJ Dividend Value P	\$0	0.00%	\$0	0.00%	\$2,253,477	2.24%	\$2,855,422	2.58%	0.00%
JHancock Disciplined Value R6	\$2,766,793	2.47%	\$2,953,399	2.68%	\$0	0.00%	\$0	0.00%	-0.21%
Vantagepoint Equity Income R5	\$0	0.00%	\$0	0.00%	\$1,338,542	1.33%	\$846,966	0.76%	0.00%
American Funds Fundamental Invs R5	\$0	0.00%	\$0	0.00%	\$3,724,981	3.71%	\$4,367,825	3.94%	0.00%
Fidelity® 500 Index	\$9,883,387	8.82%	\$9,853,121	8.96%	\$0	0.00%	\$0	0.00%	-0.13%
JPMorgan US Equity I	\$0	0.00%	\$0	0.00%	\$326,521	0.32%	\$382,334	0.34%	0.00%
Vanguard 500 Index Admiral	\$0	0.00%	\$0	0.00%	\$3,242,008	3.23%	\$3,523,083	3.18%	0.00%

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Lansing Board of Water & Light 457(b) Deferred Compensation Plan **Investment Balances**

	Q2 20)19	Q1 20)19	Q4 20	018	Q3 2(018	
Fund	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Quarter Change
American Funds Growth Fund of Amer R5	\$0	0.00%	\$0	0.00%	\$6,495,045	6.46%	\$7,404,416	6.68%	0.00%
Fidelity® Contrafund®	\$6,078,045	5.43%	\$6,631,084	6.03%	\$5,876,914	5.85%	\$7,091,038	6.40%	-0.60%
MainStay Large Cap Growth I	\$7,266,962	6.49%	\$7,307,272	6.64%	\$0	0.00%	\$0	0.00%	-0.15%
Fidelity® Mid Cap Index	\$2,367,114	2.11%	\$2,340,471	2.13%	\$0	0.00%	\$0	0.00%	-0.01%
JPMorgan Mid Cap Value R6	\$58,230	0.05%	\$25,980	0.02%	\$0	0.00%	\$0	0.00%	0.03%
Vanguard Mid Cap Index Admiral	\$0	0.00%	\$0	0.00%	\$1,528,292	1.52%	\$1,730,881	1.56%	0.00%
Westwood SMidCap Institutional	\$0	0.00%	\$0	0.00%	\$173,932	0.17%	\$208,318	0.19%	0.00%
Harbor Mid Cap Growth Admin	\$0	0.00%	\$0	0.00%	\$2,547,448	2.53%	\$3,225,551	2.91%	0.00%
T. Rowe Price Instl Mid-Cap Equity Gr	\$3,346,231	2.99%	\$3,466,633	3.15%	\$0	0.00%	\$0	0.00%	-0.16%
American Beacon Small Cap Value R6	\$577,939	0.52%	\$791,542	0.72%	\$0	0.00%	\$0	0.00%	-0.20%
Columbia Small Cap Value I Inst	\$0	0.00%	\$0	0.00%	\$371,850	0.37%	\$744,717	0.67%	0.00%
Columbia Small/Mid Cap Value Adv	\$0	0.00%	\$0	0.00%	\$376,828	0.37%	\$459,144	0.41%	0.00%
Fidelity® Small Cap Discovery	\$0	0.00%	\$0	0.00%	\$1,198,955	1.19%	\$1,411,403	1.27%	0.00%
Fidelity® Small Cap Index	\$2,807,250	2.51%	\$2,816,196	2.56%	\$0	0.00%	\$0	0.00%	-0.05%
Vanguard Small Cap Index Adm	\$0	0.00%	\$0	0.00%	\$1,176,534	1.17%	\$1,260,583	1.14%	0.00%
AMG TimesSquare Small Cap Growth N	\$349,645	0.31%	\$338,654	0.31%	\$639,816	0.64%	\$699,080	0.63%	0.00%
AllianzGI Technology Administrative	\$0	0.00%	\$0	0.00%	\$1,450,255	1.44%	\$1,833,777	1.65%	0.00%
PGIM Jennison Utility A	\$0	0.00%	\$0	0.00%	\$399,376	0.40%	\$409,771	0.37%	0.00%
T. Rowe Price Health Sciences	\$0	0.00%	\$0	0.00%	\$1,895,447	1.89%	\$2,246,389	2.03%	0.00%
Harbor International Administrative	\$0	0.00%	\$0	0.00%	\$331,222	0.33%	\$378,720	0.34%	0.00%
Oakmark International Advisor	\$60,642	0.05%	\$11,625	0.01%	\$0	0.00%	\$0	0.00%	0.04%
Vanguard Total Intl Stock Index Admiral	\$1,429,023	1.28%	\$1,285,699	1.17%	\$0	0.00%	\$0	0.00%	0.11%
American Funds Europacific Growth R6	\$766,083	0.68%	\$592,819	0.54%	\$0	0.00%	\$0	0.00%	0.15%
Fidelity® Diversified International	\$0	0.00%	\$0	0.00%	\$1,416,949	1.41%	\$1,490,899	1.34%	0.00%
Fidelity® International Discovery	\$0	0.00%	\$0	0.00%	\$1,061,173	1.06%	\$1,155,285	1.04%	0.00%

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Lansing Board of Water & Light 457(b) Deferred Compensation Plan Investment Balances

	Q2 201	9	Q1 20	19	Q4 2	018	Q3 2	018	
Fund	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Market Value	Plan Allocation	Quarter Change
Vanguard International Growth Adm	\$2,863,311	2.56%	\$3,231,921	2.94%	\$0	0.00%	\$0	0.00%	-0.38%
Nuveen Real Estate Securities I	\$793,882	0.71%	\$773,927	0.70%	\$767,087	0.76%	\$817,419	0.74%	0.01%
American Funds Capital World Gr&Inc R5	\$0	0.00%	\$0	0.00%	\$3,802,599	3.78%	\$4,858,757	4.38%	0.00%
American Funds Capital World Gr&Inc R6	\$1,323,816	1.18%	\$1,625,206	1.48%	\$0	0.00%	\$0	0.00%	-0.30%
VT III Vantagepoint Model Port Gbl Eq Gr	\$0	0.00%	\$0	0.00%	\$2,176,303	2.17%	\$2,491,912	2.25%	0.00%
Vanguard Target Retirement Income Inv	\$659,023	0.59%	\$635,729	0.58%	\$170,665	0.17%	\$128,506	0.12%	0.01%
VT Retirement IncomeAdvantage	\$2,783,758	2.49%	\$2,636,584	2.40%	\$2,836,532	2.82%	\$2,736,733	2.47%	0.09%
Vanguard Target Retirement 2015 Inv	\$1,507,458	1.35%	\$1,672,124	1.52%	\$197,911	0.20%	\$199,650	0.18%	-0.17%
Vanguard Target Retirement 2020 Inv	\$4,837,112	4.32%	\$5,191,731	4.72%	\$1,123,103	1.12%	\$1,196,666	1.08%	-0.40%
Vanguard Target Retirement 2025 Inv	\$4,780,698	4.27%	\$4,664,457	4.24%	\$1,220,961	1.21%	\$1,332,964	1.20%	0.03%
Vanguard Target Retirement 2030 Inv	\$5,202,574	4.64%	\$5,478,583	4.98%	\$1,627,814	1.62%	\$1,755,396	1.58%	-0.34%
Vanguard Target Retirement 2035 Inv	\$3,916,339	3.50%	\$3,709,444	3.37%	\$992,440	0.99%	\$1,086,499	0.98%	0.12%
Vanguard Target Retirement 2040 Inv	\$4,369,146	3.90%	\$4,183,664	3.80%	\$2,089,758	2.08%	\$2,300,343	2.08%	0.10%
Vanguard Target Retirement 2045 Inv	\$3,041,744	2.72%	\$2,852,048	2.59%	\$1,247,567	1.24%	\$1,364,490	1.23%	0.12%
Vanguard Target Retirement 2050 Inv	\$1,469,275	1.31%	\$1,403,598	1.28%	\$568,517	0.57%	\$633,380	0.57%	0.04%
Vanguard Target Retirement 2055 Inv	\$178,592	0.16%	\$163,951	0.15%	\$0	0.00%	\$0	0.00%	0.01%
Vanguard Target Retirement 2060 Inv	\$30,189	0.03%	\$26,536	0.02%	\$0	0.00%	\$0	0.00%	0.00%
Vanguard Target Retirement 2065 Inv	\$16,230	0.01%	\$15,681	0.01%	\$0	0.00%	\$0	0.00%	0.00%
Self-Directed Brokerage	\$4,436,785	3.96%	\$2,531,810	2.30%	\$1,900,374	1.89%	\$2,152,070	1.94%	1.66%
Plan Totals:	\$112,010,912	100.00%	\$110,014,506	100.00%	\$100,491,348	100.00%	\$110,856,686	100.00%	0.00%



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
Cash	-	2018-12-31	-	-	-	-	-	-	-
Peer Group: Morningstar Money Market - Taxable Benchmark: FTSE Treasury Bill 3 Mon USD Peer Group Percentile Rank Notes:			1.70 2.30	0.61 0.84	0.42 -	-	14.95 -	23,939.95 -	-0.24 -
Vantagepoint PLUS Fund R10		2018-12-31	2.39	2.13	0.56	28.00	14.75	9,380.35	1.25
Peer Group: Morningstar US SA Stable Value		2010 12 01	1.90	1.65	0.63		19.26	53,822.67	0.78
Benchmark: Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon)			3.14	1.04	-	-	-	-	-
Peer Group Percentile Rank			19	7	40		68		7
Notes:									
PIMCO Total Return A	ΡΤΤΑΧ	2009-03-26	7.27	2.64	0.89	32.00	4.75	65,684.21	-0.50
Peer Group: Morningstar Intermediate Core-Plus Bond			6.83	2.92	0.68	-	9.98	4,991.05	-0.14
Benchmark: BBgBarc US Universal TR USD			8.07	3.18	-	-	-	-	-
Peer Group Percentile Rank			61	66	70		74		75
Notes: The particular share class chosen for this fund was based on platf revenue sharing amount, which may be credited back to participant. criteria. The share class with the lowest prospectus net expense ratio	s. Due to thes	e reasons, we loo	k at the lowes	st net expens					

Fidelity® US Bond Index	FXNAX	2019-02-15	7.89	2.91	0.03	8.00	5.08	41,740.70	-0.11
Peer Group: Morningstar Intermediate Core Bond			6.77	2.62	0.56	-	10.38	9,224.46	-0.14
Benchmark: BBgBarc US Agg Bond TR USD			7.87	2.95	-	-	-	-	-
Peer Group Percentile Rank			23	23	4		70		46
Notes: This fund attempts to track the Bloomberg Barclays US Aggregate Bor	d Index.								

Meets criteria Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
PIMCO Real Return Instl	PRRIX	2019-02-14	4.50	1.44	0.88	22.00	11.50	9,402.04	-0.37
Peer Group: Morningstar Inflation-Protected Bond Benchmark: BBgBarc GbI Infl Linked US TIPS TR USD Peer Group Percentile Rank Notes: The particular share class chosen for this fund was based either on pla	atform availa	bility or taking into o	3.59 4.84 37 consideration	1.21 1.76 34 the revenue	0.65 - 66 sharing amo	- - unt.	8.31 - 26	2,571.93 -	-0.37 - 51
PIMCO Income Insti	PIMIX	2019-02-15	6.87	5.30	0.74	12.00	12.25	124,611.95	4.26
Peer Group: Morningstar Multisector Bond Benchmark: BBgBarc Global Aggregate TR USD Peer Group Percentile Rank Notes:			5.33 5.85 34	2.85 1.20 1	0.95 - 32	-	8.12 - 18	4,209.18 -	1.86 - 1
Fidelity® Balanced	FBALX	2009-03-26	6.62	7.46	0.53	32.00	10.75	33,544.28	-1.48
Peer Group: Morningstar Allocation50% to 70% Equity Benchmark: Blend (60% S&P 500 TR_40% BC Agg Bond TR USD) Peer Group Percentile Rank Notes:			4.22 9.87 36	5.13 7.75 8	1.00 - 10	-	9.71 - 37	6,219.24 -	-2.58 - 21
JHancock Disciplined Value R6	JDVWX	2019-02-15	4.17	6.89	0.70	22.00	22.41	15,038.83	-0.89
Peer Group: Morningstar Large Value Benchmark: Russell 1000 Value TR USD Peer Group Percentile Rank Notes:			2.81 8.46 67	6.89 7.46 50	0.89 - 30	-	9.58 - 6	4,114.37 -	-0.50 - 61
Fidelity® 500 Index	FXAIX	2019-02-15	10.41	10.70	0.01	8.00	10.41	198,287.06	-0.01
Peer Group: Morningstar Large Blend Benchmark: S&P 500 TR USD Peer Group Percentile Rank Notes: This fund attempts to track the S&P 500 Index			5.72 10.42 27	9.04 10.71 11	0.81 - 2	-	8.90 - 34	11,319.36 -	-1.32 - 14

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
Fidelity® Contrafund®	FCNTX	2009-03-26	7.92	12.53	0.82	52.00	28.75	121,773.98	-0.29
Peer Group: Morningstar Large Growth Benchmark: Russell 1000 Growth TR USD Peer Group Percentile Rank Notes:			7.66 11.56 73	11.64 13.39 36	0.95 - 37	-	10.73 - 2	7,145.03 -	-1.45 - 28
MainStay Large Cap Growth I	MLAIX	2019-02-15	11.86	13.44	0.73	24.00	13.66	11,931.03	-0.46
Peer Group: Morningstar Large Growth Benchmark: Russell 1000 Growth TR USD Peer Group Percentile Rank Notes:			7.66 11.56 30	11.64 13.39 21	0.95 - 27	-	10.73 - 31	7,145.03 -	-1.45 - 31
Fidelity® Mid Cap Index	FSMDX	2019-02-15	7.88	8.64	0.03	7.00	7.75	10,321.11	0.02
Peer Group: Morningstar Mid-Cap Blend Benchmark: Russell Mid Cap TR USD Peer Group Percentile Rank Notes: This fund attempts to track the Russell Mid Cap Index.			-0.42 7.83 17	6.54 8.63 14	0.97 - 2	-	8.70 - 44	3,547.08 -	-1.86 - 16
JPMorgan Mid Cap Value R6	JMVYX	2019-02-15	4.63	7.18	0.73	21.00	21.58	17,031.27	0.70
Peer Group: Morningstar Mid-Cap Value Benchmark: Russell Mid Cap Value TR USD Peer Group Percentile Rank Notes:			-2.71 3.68 18	5.62 6.72 21	0.99 - 19	-	9.07 - 4	2,191.50	-1.27 - 17
T. Rowe Price Instl Mid-Cap Equity Gr	PMEGX	2019-02-15	16.66	13.56	0.61	22.00	22.91	7,975.00	2.73
Peer Group: Morningstar Mid-Cap Growth Benchmark: Russell Mid Cap Growth TR USD Peer Group Percentile Rank Notes:			5.71 13.94 14	10.08 11.10 8	1.06 - 7	:	10.64 - 4	2,683.62	-0.79 - 9

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
American Beacon Small Cap Value R6	AASRX	2019-02-15	-7.61	4.77	0.78	20.00	20.50	6,331.28	-0.64
Peer Group: Morningstar Small Value Benchmark: Russell 2000 Value TR USD Peer Group Percentile Rank Notes:			-10.07 -6.24 56	3.83 5.39 33	1.15 - 12	-	9.68 - 10	1,368.28 -	-1.40 - 39
Fidelity® Small Cap Index	FSSNX	2019-02-15	-3.21	7.28	0.03	7.00	7.75	9,398.63	0.20
Peer Group: Morningstar Small Blend Benchmark: Russell 2000 TR USD Peer Group Percentile Rank Notes: This fund attempts to track the Russell 2000 Index.			-6.05 -3.31 43	5.93 7.06 23	1.07 - 2	-	8.98 - 46	1,547.35 -	-0.63 - 29
AMG TimesSquare Small Cap Growth N	TSCPX	2014-03-14	8.34	10.34	1.11	19.00	19.41	1,036.74	2.32
Peer Group: Morningstar Small Growth Benchmark: Russell 2000 Growth TR USD Peer Group Percentile Rank Notes:			-1.89 -0.49 25	9.25 8.63 36	1.15 - 47	-	10.41 - 9	1,487.08 -	1.22 - 36
Oakmark International Advisor	ΟΑΥΙΧ	2019-02-15	-6.42	1.54	0.83	26.00	26.75	33,013.40	-0.65
Peer Group: Morningstar Foreign Large Value Benchmark: MSCI EAFE NR USD Peer Group Percentile Rank Notes:			-4.66 1.08 92	0.26 2.25 14	1.00 - 32	-	8.35 - 1	1,356.45 -	-1.87 - 14
Vanguard Total Intl Stock Index Admiral	VTIAX	2019-02-15	0.64	2.33	0.11	23.00	10.83	381,621.69	-0.32
Peer Group: Morningstar Foreign Large Blend Benchmark: FTSE Global All Cap ex US TR USD Peer Group Percentile Rank Notes: This fund attempts to track the FTSE Global All Cap ex US Index.			-2.03 0.81 41	2.07 2.70 35	0.93 - 5	-	7.25 - 23	6,572.69 -	-0.52 - 37



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
American Funds Europacific Growth R6	RERGX	2019-02-15	1.91	4.45	0.49	35.00	27.50	161,660.47	2.25
Peer Group: Morningstar Foreign Large Blend Benchmark: MSCI EAFE NR USD Peer Group Percentile Rank Notes:			-2.03 1.08 23	2.07 2.25 6	0.93 - 20	-	7.25 - 1	6,572.69 -	-0.10 - 6
Vanguard International Growth Adm	VWILX	2019-02-15	-0.40	6.78	0.32	37.00	16.33	37,113.45	1.94
Peer Group: Morningstar Foreign Large Growth Benchmark: MSCI EAFE Growth NR USD Peer Group Percentile Rank Notes:			-0.37 4.24 76	3.71 4.39 11	1.03 - 3	-	9.05 - 13	8,111.35 -	-0.52 - 15
Nuveen Real Estate Securities I	FARCX	2011-02-18	11.27	7.63	1.02	24.00	14.08	3,386.13	0.28
Peer Group: Morningstar Real Estate Benchmark: DJ US Select REIT TR USD Peer Group Percentile Rank Notes:			9.39 9.75 43	7.35 7.61 41	1.04 - 49	-	11.26 - 28	2,106.33 -	0.17 - 48
American Funds Capital World Gr&Inc R6	RWIGX	2019-02-14	3.46	6.03	0.44	26.00	26.25	97,362.06	0.22
Peer Group: Morningstar World Large Stock Benchmark: MSCI ACWI NR USD Peer Group Percentile Rank Notes:			2.14 5.74 64	5.79 6.16 45	1.03 - 4	-	7.05 - 2	4,372.59 -	-0.13 - 44
Vanguard Target Retirement Income Inv	VTINX	2012-11-16	6.54	4.18	0.12	15.00	6.33	16,765.21	0.37
Peer Group: Morningstar Target-Date Retirement Benchmark: S&P Target Date Retirement Income TR USD Peer Group Percentile Rank Notes:			5.38 5.90 30	3.50 3.94 19	0.68 - 4	-	8.12 - 65	556.86 -	-0.46 - 5

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
VT Retirement IncomeAdvantage	-	2018-12-31	5.40	4.48	1.59	-	-	-	-
Peer Group: Morningstar Target-Date Retirement Benchmark: S&P Target Date Retirement Income TR USD Peer Group Percentile Rank Notes:			5.38 5.90 74	3.50 3.94 11	0.68 - 97	-	8.12	556.86 -	-0.46 -
Vanguard Target Retirement 2015 Inv	ντχνχ	2012-11-16	6.48	4.89	0.13	15.00	6.33	15,774.55	0.37
Peer Group: Morningstar Target-Date 2015 Benchmark: S&P Target Date 2015 TR USD Peer Group Percentile Rank Notes:			5.35 5.77 36	4.37 4.77 29	0.65 - 5	-	6.49 - 41	1,172.91 -	-0.27 - 5
Vanguard Target Retirement 2020 Inv	VTWNX	2012-11-16	6.53	5.55	0.13	13.00	6.33	32,912.28	0.27
Peer Group: Morningstar Target-Date 2020 Benchmark: S&P Target Date 2020 TR USD Peer Group Percentile Rank Notes:			5.39 5.78 30	4.76 5.15 8	0.70 - 4	-	7.28 - 53	2,340.14 -	-0.23 - 10
Vanguard Target Retirement 2025 Inv	νττνχ	2012-11-16	6.61	5.94	0.13	15.00	6.33	43,560.48	0.30
Peer Group: Morningstar Target-Date 2025 Benchmark: S&P Target Date 2025 TR USD Peer Group Percentile Rank Notes:			5.27 5.70 28	5.13 5.52 6	0.68 - 4	-	6.95 - 53	2,971.60 -	-0.27 - 6
Vanguard Target Retirement 2030 Inv	VTHRX	2012-11-16	6.42	6.22	0.14	13.00	6.33	38,403.30	0.27
Peer Group: Morningstar Target-Date 2030 Benchmark: S&P Target Date 2030 TR USD Peer Group Percentile Rank Notes:			5.09 5.55 32	5.67 5.89 18	0.70 - 4	-	7.20 - 51	3,299.79 -	-0.30 - 10

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
Vanguard Target Retirement 2035 Inv	VTTHX	2012-11-16	6.27	6.49	0.14	15.00	6.33	36,493.03	0.20
Peer Group: Morningstar Target-Date 2035 Benchmark: S&P Target Date 2035 TR USD Peer Group Percentile Rank Notes:			4.97 5.36 31	5.88 6.23 19	0.69 - 4	-	6.88 - 52	2,605.43 -	-0.42 - 13
Vanguard Target Retirement 2040 Inv	VFORX	2012-11-16	6.00	6.72	0.14	13.00	6.33	28,469.79	0.06
Peer Group: Morningstar Target-Date 2040 Benchmark: S&P Target Date 2040 TR USD Peer Group Percentile Rank Notes:			4.64 5.26 33	6.14 6.47 22	0.74 - 4	-	7.21 - 51	2,432.02 -	-0.45 - 21
Vanguard Target Retirement 2045 Inv	ντινχ	2012-11-16	5.90	6.86	0.15	15.00	6.33	26,143.66	0.06
Peer Group: Morningstar Target-Date 2045 Benchmark: S&P Target Date 2045 TR USD Peer Group Percentile Rank Notes:			4.59 5.15 33	6.17 6.61 19	0.71 - 4	-	6.83 - 52	1,728.37 -	-0.54 - 18
Vanguard Target Retirement 2050 Inv	VFIFX	2012-11-16	5.86	6.85	0.15	13.00	6.33	18,853.19	0.09
Peer Group: Morningstar Target-Date 2050 Benchmark: S&P Target Date 2050 TR USD Peer Group Percentile Rank Notes:			4.41 5.03 37	6.32 6.73 24	0.74 - 4	-	6.86 - 51	1,398.50 -	-0.48 - 22
Vanguard Target Retirement 2055 Inv	VFFVX	2012-11-16	5.88	6.82	0.15	8.00	6.33	9,695.26	0.08
Peer Group: Morningstar Target-Date 2055 Benchmark: S&P Target Date 2055 TR USD Peer Group Percentile Rank Notes:			4.48 5.03 34	6.36 6.79 27	0.72 - 4	-	5.61 - 45	702.99 -	-0.54 - 21

Meets criteria

Does not meet criteria



Investment Option	Ticker	Plan InceptionDate	Return 1Yr > 25% of Peers	Return 5Yr > 50% of Peers	Expense Ratio < 50% of Peers	Prod Hist >= 3 Years	Manager Tenure >= 3 Years	AUM >= 250 MM	Alpha 5Yr > 50% of Peers
Vanguard Target Retirement 2060 Inv	VTTSX	2012-11-16	5.86	6.81	0.15	7.00	6.33	4,078.65	0.07
Peer Group: Morningstar Target-Date 2060+			4.67	6.68	0.71	-	2.71	181.76	0.00
Benchmark: S&P Target Date 2055 TR USD			5.03	6.79	-	-	-	-	-
Peer Group Percentile Rank			41	42	5		1		42

Notes:

Benchmark comparison for Target Date 2060 Funds is the S&P 2055 Target. As of the date of this report the "S&P Target 2060" Index has not yet been assigned as the Morningstar Category from our pricing service. As such the most comparable benchmark has been included. When the S&P Target 2060 Index is available, the benchmark will be changed.

Vanguard Target Retirement 2065 Inv	VLXVX	2012-11-16	5.84	-	0.15	1.00	1.91	365.15	-
Peer Group: Morningstar Target-Date 2060+			4.67	6.68	0.71	-	2.71	181.76	0.00
Benchmark: S&P Target Date 2055 TR USD			5.03	6.79	-	-	-	-	-
Peer Group Percentile Rank			43		5		65		

Notes:

Benchmark comparison for Target Date 2065 Funds is the S&P 2055 Target. As of the date of this report the "S&P Target 2065" Index has not yet been assigned as the Morningstar Category from our pricing service. As such the most comparable benchmark has been included. When the S&P Target 2065 Index is available, the benchmark will be changed.

Meets criteria Does not meet criteria



				1 Y	′ear	3 \	/ear	5 ۲	/ear	10	Year	Since	Inception
Investment Option	Ticker	QTD Return	YTD Return	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	Inception Date
Cash	-	-	-	-	-	-	-	-	-	-	-	-	-
Universe: Morningstar Money Market - Taxable		0.49	0.99	1.84	555	0.98	508	0.60	443	0.30	393		
Benchmark: FTSE Treasury Bill 3 Mon USD		0.61	1.21	2.30		1.36		0.84		0.46			
Vantagepoint PLUS Fund R10	-	0.61	1.21	2.39	19	2.21	10	2.13	7	2.17	35	3.56	01/02/199 [,]
Universe: Morningstar US SA Stable Value		0.67	1.35	2.30	206	1.78	186	1.64	156	1.96	98		
Benchmark: Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon)		1.04	1.84	3.14		1.34		1.04		0.84			
PIMCO Total Return A	ΡΤΤΑΧ	3.12	5.90	7.27	61	2.81	55	2.64	66	4.28	73	6.75	05/11/1987
Universe: Morningstar Intermediate Core-Plus Bond		2.93	6.40	7.35	623	2.95	539	2.84	453	4.82	332		
Benchmark: BBgBarc US Universal TR USD		3.11	6.54	8.07		2.84		3.18		4.37			
Fidelity® US Bond Index	FXNAX	2.97	6.01	7.89	23	2.20	47	2.91	23	3.82	51	5.93	05/04/2011
Universe: Morningstar Intermediate Core Bond		2.83	5.77	7.24	394	2.09	343	2.55	302	3.86	227		
Benchmark: BBgBarc US Agg Bond TR USD		3.08	6.11	7.87		2.31		2.95		3.90			
PIMCO Real Return Instl	PRRIX	2.70	6.33	4.50	37	2.36	18	1.44	34	3.96	5	5.67	01/29/1997
Universe: Morningstar Inflation-Protected Bond		2.51	5.80	4.12	223	1.92	193	1.22	165	3.14	101		
Benchmark: BBgBarc Gbl Infl Linked US TIPS TR USD		2.86	6.15	4.84		2.08		1.76		3.64			
PIMCO Income Insti	PIMIX	2.40	5.50	6.87	34	6.31	9	5.30	1	9.89	1	8.38	03/30/2007
Universe: Morningstar Multisector Bond		2.62	6.91	6.23	342	4.45	306	2.82	243	5.90	134		
Benchmark: BBgBarc Global Aggregate TR USD		3.29	5.57	5.85		1.62		1.20		2.89			
Fidelity® Balanced	FBALX	3.70	14.75	6.62	36	10.27	8	7.46	8	10.93	8	9.18	11/06/1986
Universe: Morningstar Allocation50% to 70% Equity		2.95	12.21	5.73	735	7.79	679	5.04	596	8.93	431		
Benchmark: Blend (60% S&P 500 TR_40% BC Agg Bond TR USD)		3.96	13.64	9.87		9.51		7.75		10.50			
JHancock Disciplined Value R6	JDVWX	2.96	12.54	4.17	67	11.09	30	6.89	50	12.70	38	8.33	01/02/1997
Universe: Morningstar Large Value		3.02	14.59	5.79	1236	10.12	1103	6.84	956	12.20	703		
Benchmark: Russell 1000 Value TR USD		3.84	16.24	8.46		10.19		7.46		13.19			
Fidelity® 500 Index	FXAIX	4.30	18.54	10.41	27	14.17	18	10.70	11	14.68	10	10.21	05/04/2011
Universe: Morningstar Large Blend		3.82	17.22	8.22	1408	12.51	1206	8.74	1067	13.24	812		
Benchmark: S&P 500 TR USD		4.30	18.54	10.42		14.19		10.71		14.70			

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				1)	/ear	3 \	(ear	5 ۲	/ear	10	Year	Since	Inception
Investment Option	Ticker	QTD Return	YTD Return	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	Inceptior Date
Fidelity® Contrafund®	FCNTX	5.44	20.77	7.92	73	17.81	38	12.53	36	15.42	37	12.56	05/17/196
Universe: Morningstar Large Growth		4.63	21.10	10.01	1383	16.92	1245	11.27	1110	14.67	822		
Benchmark: Russell 1000 Growth TR USD		4.64	21.49	11.56		18.07		13.39		16.28			
MainStay Large Cap Growth I	MLAIX	4.65	23.04	11.86	30	20.02	18	13.44	21	15.63	31	9.05	07/03/199
Universe: Morningstar Large Growth		4.63	21.10	10.01	1383	16.92	1245	11.27	1110	14.67	822		
Benchmark: Russell 1000 Growth TR USD		4.64	21.49	11.56		18.07		13.39		16.28			
Fidelity® Mid Cap Index	FSMDX	4.14	21.36	7.88	17	12.16	26	8.64	14	-	-	14.80	09/08/201
Universe: Morningstar Mid-Cap Blend		3.04	17.52	2.41	437	9.98	362	6.04	312	12.87	228		
Benchmark: Russell Mid Cap TR USD		4.13	21.35	7.83		12.16		8.63		15.16			
JPMorgan Mid Cap Value R6	JMVYX	3.10	18.23	4.63	18	8.51	64	7.18	21	14.40	11	12.09	11/13/199
Universe: Morningstar Mid-Cap Value		2.52	15.80	0.25	415	8.73	363	5.57	321	12.75	217		
Benchmark: Russell Mid Cap Value TR USD		3.19	18.02	3.68		8.95		6.72		14.56			
T. Rowe Price Instl Mid-Cap Equity Gr	PMEGX	7.26	25.41	16.66	14	17.52	30	13.56	8	17.68	3	12.54	07/31/199
Universe: Morningstar Mid-Cap Growth		5.61	24.97	9.88	602	15.59	539	9.78	484	14.53	367		
Benchmark: Russell Mid Cap Growth TR USD		5.40	26.08	13.94		16.49		11.10		16.02			
American Beacon Small Cap Value R6	AASRX	1.78	14.21	-7.61	56	8.62	36	4.77	33	13.05	21	9.89	12/31/199
Universe: Morningstar Small Value		0.63	12.92	-8.05	417	7.69	379	3.59	337	11.65	226		
Benchmark: Russell 2000 Value TR USD		1.37	13.47	-6.24		9.81		5.39		12.40			
Fidelity® Small Cap Index	FSSNX	2.13	17.00	-3.21	43	12.46	16	7.28	23	-	-	13.87	09/08/201
Universe: Morningstar Small Blend		2.21	15.74	-3.76	733	10.09	633	5.65	516	12.70	375		
Benchmark: Russell 2000 TR USD		2.10	16.98	-3.31		12.30		7.06		13.45			
AMG TimesSquare Small Cap Growth N	TSCPX	4.35	25.63	8.34	25	16.15	47	10.34	36	15.25	36	9.56	01/21/200
Universe: Morningstar Small Growth		4.12	21.82	3.22	672	16.03	585	9.17	516	14.46	395		
Benchmark: Russell 2000 Growth TR USD		2.75	20.36	-0.49		14.69		8.63		14.41			
Oakmark International Advisor	ΟΑΥΙΧ	3.36	12.78	-6.42	92	10.64	3	1.54	14	9.07	4	7.42	09/30/199
Universe: Morningstar Foreign Large Value		1.71	10.51	-2.01	339	6.84	297	0.08	238	5.67	161		
Benchmark: MSCI EAFE NR USD		3.68	14.03	1.08		9.11		2.25		6.90			



				1 \	/ear	3 \	/ear	5 Y	/ear	10	Year	Since	Inception
Investment Option	Ticker	QTD Return	YTD Return	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	Inception Date
Vanguard Total Intl Stock Index Admiral	VTIAX	2.82	13.35	0.64	41	8.97	29	2.33	35	6.60	50	4.68	04/29/199
Universe: Morningstar Foreign Large Blend		2.98	13.58	-0.05	722	8.13	611	2.03	488	6.44	366		
Benchmark: FTSE Global All Cap ex US TR USD		2.99	13.58	0.81		9.51		2.70		7.26			
American Funds Europacific Growth R6	RERGX	3.87	17.59	1.91	23	10.84	4	4.45	6	8.15	7	10.63	04/16/198
Universe: Morningstar Foreign Large Blend		2.98	13.58	-0.05	722	8.13	611	2.03	488	6.44	366		
Benchmark: MSCI EAFE NR USD		3.68	14.03	1.08		9.11		2.25		6.90			
Vanguard International Growth Adm	VWILX	3.23	18.63	-0.40	76	15.36	4	6.78	11	10.10	11	10.53	09/30/198
Universe: Morningstar Foreign Large Growth		4.81	18.29	2.25	465	9.63	396	4.09	336	8.18	250		
Benchmark: MSCI EAFE Growth NR USD		5.73	18.47	4.24		9.68		4.39		8.23			
Nuveen Real Estate Securities I	FARCX	1.51	18.34	11.27	43	4.17	51	7.63	41	15.33	30	11.44	06/30/199
Universe: Morningstar Real Estate		1.93	18.33	10.45	259	4.66	226	7.23	198	14.53	139		
Benchmark: DJ US Select REIT TR USD		0.82	16.67	9.75		3.73		7.61		15.40			
American Funds Capital World Gr&Inc R6	RWIGX	3.00	15.62	3.46	64	10.97	47	6.03	45	10.23	50	10.46	03/26/199
Universe: Morningstar World Large Stock		3.54	16.47	4.90	864	11.05	725	5.96	597	10.25	355		
Benchmark: MSCI ACWI NR USD		3.61	16.23	5.74		11.62		6.16		10.15			
Vanguard Target Retirement Income Inv	VTINX	2.97	8.63	6.54	30	5.24	42	4.18	19	6.36	35	5.25	10/27/200
Universe: Morningstar Target-Date Retirement		2.72	8.63	5.89	184	5.02	159	3.48	127	5.96	93		
Benchmark: S&P Target Date Retirement Income TR USD		2.82	8.55	5.90		5.02		3.94		6.03			
VT Retirement IncomeAdvantage	-	3.01	11.77	5.40	74	6.94	2	4.48	11	6.94	16	-	-
Universe: Morningstar Target-Date Retirement		2.72	8.63	5.89	184	5.02	159	3.48	127	5.96	93		
Benchmark: S&P Target Date Retirement Income TR USD		2.82	8.55	5.90		5.02		3.94		6.03			
Vanguard Target Retirement 2015 Inv	ντχνχ	3.05	9.74	6.48	36	6.66	43	4.89	29	8.33	23	6.10	10/27/200
Universe: Morningstar Target-Date 2015		2.95	10.03	5.99	135	6.45	109	4.32	79	7.72	54		
Benchmark: S&P Target Date 2015 TR USD		2.79	9.87	5.77		6.54		4.77		7.89			
Vanguard Target Retirement 2020 Inv	VTWNX	3.24	11.32	6.53	30	7.82	22	5.55	8	9.15	13	6.20	06/07/200
Universe: Morningstar Target-Date 2020		3.02	10.67	5.96	245	6.89	204	4.52	163	8.08	101		
Benchmark: S&P Target Date 2020 TR USD		2.88	10.54	5.78		7.28		5.15		8.66			



				1)	(ear	3 \	(ear	5 Y	′ear	10	Year	Since	Inception
Investment Option	Ticker	QTD Return	YTD Return	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	%Rank #Funds	Return	Inceptic Date
Vanguard Target Retirement 2025 Inv	VTTVX	3.35	12.46	6.61	28	8.69	26	5.94	6	9.79	16	6.72	10/27/20
Universe: Morningstar Target-Date 2025		3.16	11.87	5.99	228	7.93	186	5.00	149	8.96	80		
Benchmark: S&P Target Date 2025 TR USD		2.99	11.61	5.70		8.09		5.52		9.33			
Vanguard Target Retirement 2030 Inv	VTHRX	3.41	13.27	6.42	32	9.39	34	6.22	18	10.35	18	6.52	06/07/20
Universe: Morningstar Target-Date 2030		3.24	12.98	5.86	234	8.75	194	5.44	153	9.42	91		
Benchmark: S&P Target Date 2030 TR USD		3.09	12.78	5.55		8.82		5.89		9.91			
Vanguard Target Retirement 2035 Inv	VTTHX	3.47	14.03	6.27	31	10.11	34	6.49	19	10.88	13	7.31	10/27/200
Universe: Morningstar Target-Date 2035		3.31	14.02	5.71	223	9.66	181	5.80	144	10.07	75		
Benchmark: S&P Target Date 2035 TR USD		3.18	13.78	5.36		9.50		6.23		10.39			
Vanguard Target Retirement 2040 Inv	VFORX	3.46	14.79	6.00	33	10.79	27	6.72	22	11.17	15	6.95	06/07/20
Universe: Morningstar Target-Date 2040		3.32	14.69	5.48	233	10.04	193	6.01	152	10.21	91		
Benchmark: S&P Target Date 2040 TR USD		3.27	14.45	5.26		10.00		6.47		10.73			
Vanguard Target Retirement 2045 Inv	ντινχ	3.51	15.39	5.90	33	11.05	28	6.86	19	11.24	13	7.72	10/27/20
Universe: Morningstar Target-Date 2045		3.38	15.29	5.42	223	10.51	181	6.17	144	10.54	74		
Benchmark: S&P Target Date 2045 TR USD		3.32	14.78	5.15		10.32		6.61		10.94			
Vanguard Target Retirement 2050 Inv	VFIFX	3.47	15.38	5.86	37	11.03	33	6.85	24	11.23	15	7.00	06/07/200
Universe: Morningstar Target-Date 2050		3.37	15.44	5.31	233	10.47	193	6.22	152	10.48	73		
Benchmark: S&P Target Date 2050 TR USD		3.32	14.97	5.03		10.61		6.73		11.10			
Vanguard Target Retirement 2055 Inv	VFFVX	3.48	15.38	5.88	34	11.04	40	6.82	27	-	-	10.80	08/18/20 ⁻
Universe: Morningstar Target-Date 2055		3.40	15.60	5.30	224	10.71	180	6.29	137	10.74	13		
Benchmark: S&P Target Date 2055 TR USD		3.34	15.02	5.03		10.80		6.79		11.24			
Vanguard Target Retirement 2060 Inv	VTTSX	3.48	15.36	5.86	41	11.03	49	6.81	42	-	-	9.98	01/19/20 [,]
Universe: Morningstar Target-Date 2060+		3.47	15.82	5.44	207	10.88	119	6.47	15	-	0		
Benchmark: S&P Target Date 2055 TR USD		3.34	15.02	5.03		10.80		6.79		11.24			
Vanguard Target Retirement 2065 Inv	VLXVX	3.52	15.40	5.84	43	-	-	-	-	-	-	7.29	07/12/201
Universe: Morningstar Target-Date 2060+		3.47	15.82	5.44	207	10.88	119	6.47	15	-	0		
Benchmark: S&P Target Date 2055 TR USD		3.34	15.02	5.03		10.80		6.79		11.24			



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Cash

und Inception Date:	reasury Bill 3 Mon U : -	50		lanager T /ebsite: -				Fund Family: -	teria urn 1Yr	Criteria NE
	Last Quarter	Year to Date	1 Year	3 Year	5 Year	10 Year	Since Inception	Net Expense Ratio	urn 5Yr	NE
Fund Benchmark Peers #Funds Rank%	- 0.61 0.49 566	1.21 0.99 564	- 2.30 1.84 555	1.36 0.98 508	0.84 0.60 443	- 0.46 0.30 393	-	Pro	eense Ratio d Hist nager Tenure M	NE NE NE
Returns for Period	s Ending 06/30/201	9					Returns fo	0 Fund AvgPeer	ha 5Yr	NE

Cash FTSE Treasury Bill 3 Mon USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Cash

Portfolio Analysis	Fund	Peer Group	Returns for 12 Quarter Rolling Periods
verage Effective Duration verage Effective Maturity	-	-	Insufficient data to display graph
lumber of Holdings	-	76	
Statistics Relative to FTSE Treasury Bil	ll 3 Mon USD for 5 Years		Alpha Relative to FTSE Treasury Bill 3 Mon USD for 12 Quarter Rolling Periods
			Insufficient data to display graph
Insufficient data to display graph			insufficient data to display graph
	Fund	Deer Crown	
Risk Measures 5 Yr	Fund	Peer Group	
Risk Measures 5 Yr Alpha	Fund	-0.24	
Risk Measures 5 Yr Alpha Beta		-0.24 1.05	
Risk Measures 5 Yr Alpha Beta	-	-0.24	
Insufficient data to display graph Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio	-	-0.24 1.05	
Risk Measures 5 Yr Alpha Beta Sharpe Ratio	-	-0.24 1.05 -3.53	



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vantagepoint PLUS Fund R10

Ticker:

Peer Group/Category: Morningstar US SA Stable Value Benchmark: Blend (50% BofAML US Treasuries 1-3 Yr TR_50% Manager Tenure: 14.75 Years BofAML US Treasury Bill 3 Mon) Fund Inception Date: 01-02-1991

Fund Manager: Wayne Wicker Website: -

Total Fund Assets: \$9.38 bn Net Expense Ratio: 0.56 Fund Family: ICMA-RC

Fund

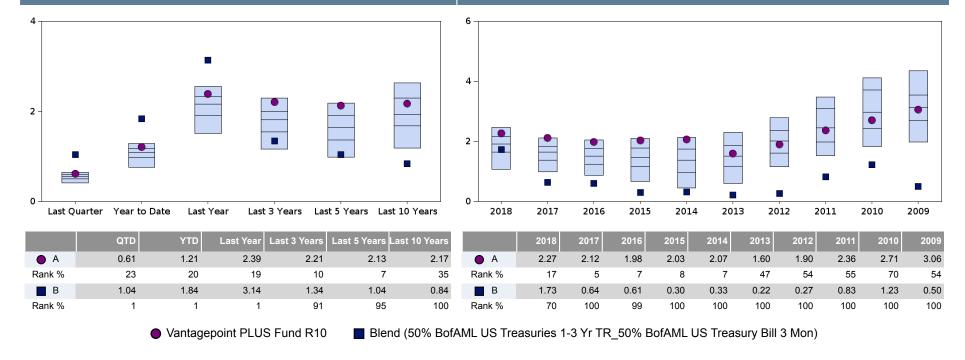
AvgPeer

	Last Quarter	Year to Date	1 Year	3 Year	5 Year	10 Year	Since Inception	Net	Expense Ratio
Fund	0.61	1.21	2.39	2.21	2.13	2.17	3.56	1.	
Benchmark	1.04	1.84	3.14	1.34	1.04	0.84		- 1	
Peers	0.67	1.35	2.30	1.78	1.64	1.96			
#Funds	215	215	206	186	156	98			ſ
Rank%	23	20	19	10	7	35			

Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

Returns for Calendar Years

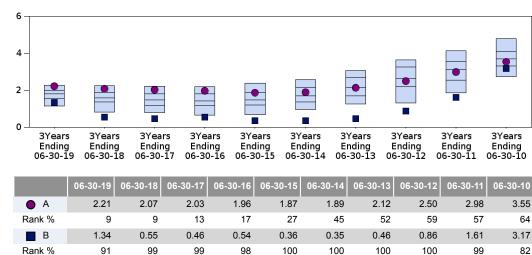




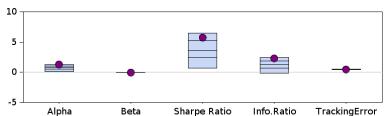
Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vantagepoint PLUS Fund R10

Portfolio Analysis	Fund	Peer Group	Retu
Average Effective Duration Average Effective Maturity Number of Holdings	2.55	5 2.21 - 2.59 - 392	6
Credit Quality Rating (%)	Fund	Peer Group	2 –
AAA	54.98	79.14	₀⊥
AA	16.79	4.93	0
A	17.83	8.18	
BBB	9.26	7.57	
BB	1.14	0.07	
В	0.00	0.00	
Below B	0.00	0.10	
Not Rated	0.00	0.00	Ra
			Ra

p Returns for 12 Quarter Rolling Periods



Statistics Relative to Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon) for 5 Years

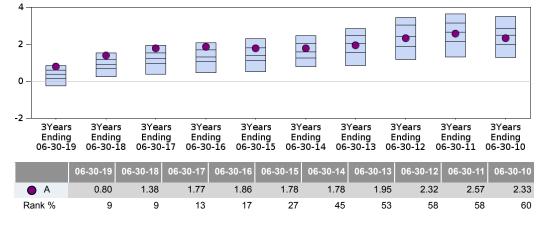


Risk Measures 5 Yr	Fund	Peer Group
Alpha	1.25	0.77
Beta	-0.05	-0.05
Sharpe Ratio	5.73	3.76
Information Ratio	2.29	1.26
RSquared	0.85	1.36
TrackingError	0.48	0.47

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Vantagepoint PLUS Fund R10

Alpha Relative to Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon) for 12 Quarter Rolling Periods



Blend (50% BofAML US Treasuries 1-3 Yr TR_50% BofAML US Treasury Bill 3 Mon)



Lansing Board of Water & Light 457(b) Deferred Compensation Plan **PIMCO Total Return A**

Ticker: PTTAX

Peer Group/Category: Morningstar Intermediate Core-Plus Fund Manager: Scott Mather Bond Benchmark: BBgBarc US Universal TR USD Fund Inception Date: 05-11-1987

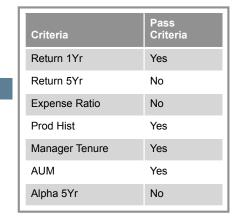
Manager Tenure: 4.75 Years Website: www.pimco.com

Total Fund Assets: \$65.68 bn Net Expense Ratio: 0.89 Fund Family: PIMCO

PTTAX

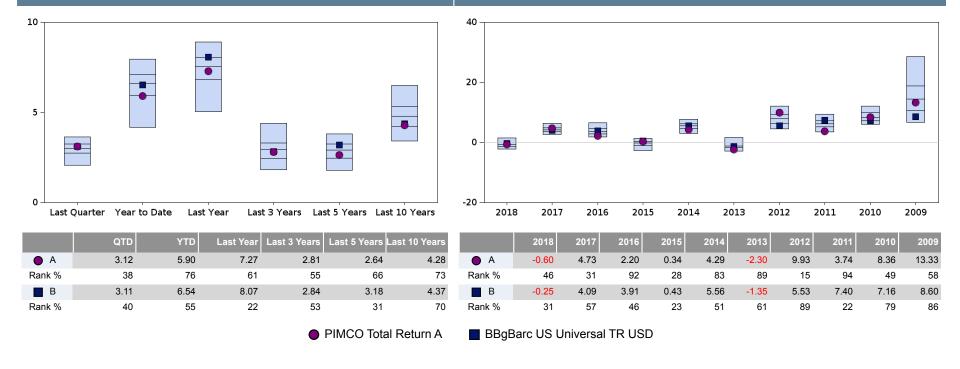
AvgPeer

	Last Quarter	Year to Date	1 Year	3 Year	5 Year	10 Year	Since Inception	Net Expe	nse Ratio
Fund	3.12	5.90	7.27	2.81	2.64	4.28	6.55	1	
Benchmark	3.11	6.54	8.07	2.84	3.18	4.37		-	
Peers	2.93	6.40	7.35	2.95	2.84	4.82			
#Funds	645	643	623	539	453	332			
Rank%	38	76	61	55	66	73			



Returns for Periods Ending 06/30/2019

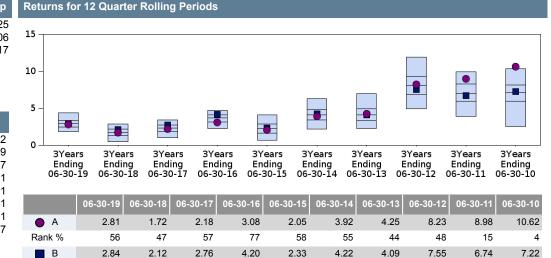
Returns for Calendar Years



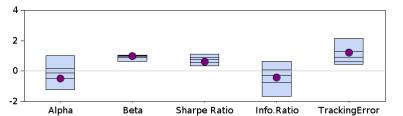


Lansing Board of Water & Light 457(b) Deferred Compensation Plan PIMCO Total Return A

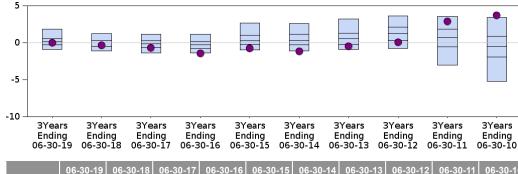
Portfolio Analysis	Fund	Peer Group
Average Effective Duration	3.78	5.25
Average Effective Maturity	4.92	8.06
Number of Holdings	7539	917
Credit Quality Rating (%)	Fund	Peer Group
AAA	66.00	48.42
AA	4.00	6.49
Α	12.00	12.57
	12.00	12.57
BBB	8.00	20.31
BBB BB		
	8.00	20.31
BB	8.00 5.00	20.31 5.31
BB B	8.00 5.00 3.00	20.31 5.31 2.91



Statistics Relative to BBgBarc US Universal TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.50	-0.12
Beta	0.99	0.91
Sharpe Ratio	0.60	0.73
Information Ratio	-0.44	-0.40
RSquared	83.06	84.36
TrackingError	1.23	1.07



	06-30-19	06-30-18	06-30-17	06-30-16	06-30-15	06-30-14	06-30-13	06-30-12	06-30-11	06-30-10
Ο Α	0.01	-0.35	-0.69	-1.46	-0.77	-1.15	-0.49	0.07	2.91	3.73
Rank %	59	68	82	96	92	96	87	81	13	3

PIMCO Total Return A

BBgBarc US Universal TR USD

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Rank %

54

28

23

Alpha Relative to BBgBarc US Universal TR USD for 12 Quarter Rolling Periods

20

45

46

52

63

56

48



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® US Bond Index

Ticker: FXNAX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Intermediate Core Bond Fund Manager: Brandon Bettencourt Benchmark: BBgBarc US Agg Bond TR USD Fund Inception Date: 05-04-2011

Last Quarter

2.97

3.08

2.83

408

49

Manager Tenure: 5.08 Years Website: www.institutional.fidelity.com

5 Year

2.91

2.95

2.55

302

23

3.82

3.90

3.86

227

51

3 Year

2.20

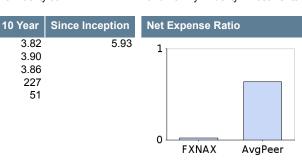
2.31

2.09

343

47

Total Fund Assets: \$41.74 bn Net Expense Ratio: 0.02 Fund Family: Fidelity Investments



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

10 • 5 0 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year

Year to Date

6.01

6.11

5.77

403

52

1 Year

7.89

7.87

7.24

394

23

	QTD	YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Ο Α	2.97	6.01	7.89	2.20	2.91	3.82
Rank %	49	52	23	47	23	51
B	3.08	6.11	7.87	2.31	2.95	3.90
Rank %	32	43	25	35	20	47

Returns for Calendar Years



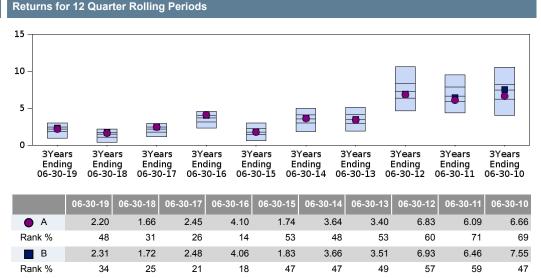
Fidelity® US Bond Index

BBgBarc US Agg Bond TR USD

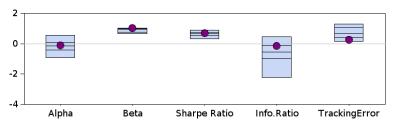


Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® US Bond Index

Portfolio Analysis	Fund	Peer Group
Average Effective Duration	5.73	5.41
Average Effective Maturity	-	8.49
Number of Holdings	1977	1356
Credit Quality Rating (%)	Fund	Peer Group
AAA	74.96	63.74
AAA AA	74.96 4.44	63.74 5.60
AA	4.44	5.60
AA A	4.44 11.16	5.60 11.71
AA A BBB	4.44 11.16 9.30	5.60 11.71 15.81
AA A BBB BB	4.44 11.16 9.30 0.04	5.60 11.71 15.81 0.95
AA A BBB BB B	4.44 11.16 9.30 0.04 0.00	5.60 11.71 15.81 0.95 0.22

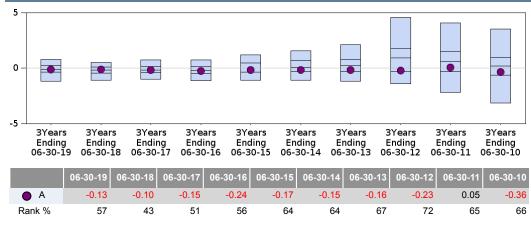


Statistics Relative to BBgBarc US Agg Bond TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.11	-0.17
Beta	1.04	0.89
Sharpe Ratio	0.68	0.64
Information Ratio	-0.16	-0.69
RSquared	99.45	93.39
TrackingError	0.25	0.74

Alpha Relative to BBgBarc US Agg Bond TR USD for 12 Quarter Rolling Periods



Fidelity® US Bond Index

BBgBarc US Agg Bond TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan PIMCO Real Return Instl

Ticker: PRRIX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Inflation-Protected Bond Benchmark: BBgBarc Gbl Infl Linked US TIPS TR USD Fund Inception Date: 01-29-1997

Last Quarter

2.70

2.86

2.51

226

40

Fund Manager: Mihir Worah Manager Tenure: 11.50 Years Website: www.pimco.com

5 Year

1.44

1.76

1.22

165

34

3 Year

2.36

2.08

1.92

193

18

10 Year

3.96

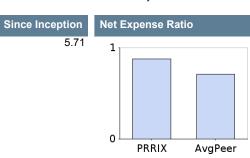
3.64

3.14

101

5

Total Fund Assets: \$9.40 bn Net Expense Ratio: 0.88 Fund Family: PIMCO



Outtonia	Pass
Criteria	Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	No
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	No

Returns for Periods Ending 06/30/2019

QTD

2.70

2.86

40

20

15 10 5 0 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years

Last Year

4.50

37

4.84

17

Last Year

YTD

6.33

22

41

6.15

Year to Date

6.33

6.15

5.80

226

22

1 Year

4.50

4.84

4.12

223

37

Returns for Calendar Years



PIMCO Real Return Instl

1.44

34

1.76

10

Last 3 Years

2.36

18

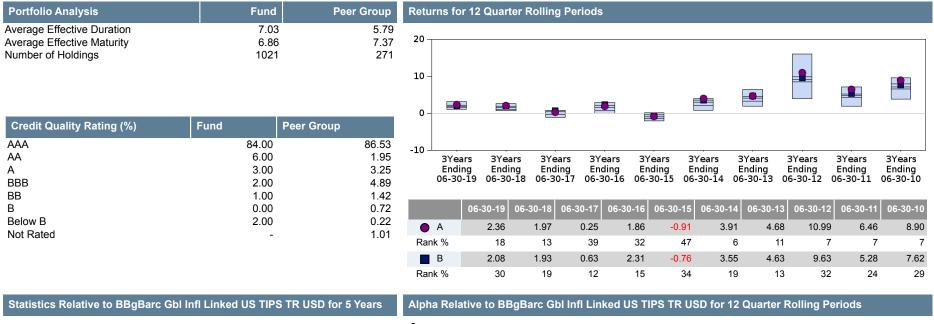
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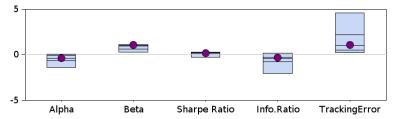
2.08

BBgBarc Gbl Infl Linked US TIPS TR USD

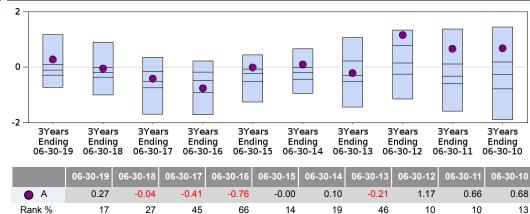


Lansing Board of Water & Light 457(b) Deferred Compensation Plan PIMCO Real Return Instl





Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.37	-0.43
Beta	1.09	0.90
Sharpe Ratio	0.16	0.10
Information Ratio	-0.29	-0.64
RSquared	92.98	83.81
TrackingError	1.08	1.56



PIMCO Real Return Instl

BBgBarc Gbl Infl Linked US TIPS TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan PIMCO Income Instl

Ticker: PIMIX

Fund

Peers #Funds

Rank%

Ο Α

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Multisector Bond Benchmark: BBgBarc Global Aggregate TR USD Fund Inception Date: 03-30-2007

Last Quarter

2.40

3.29

2.62

363

64

Fund Manager: Daniel Ivascyn Manager Tenure: 12.25 Years Website: www.pimco.com

3 Year

6.31

1.62

4.45

306

9

5 Year

5.30

1.20

2.82

243

1

10 Year

9.89

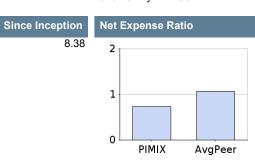
2.89

5.90

134

1

Total Fund Assets: \$124.61 bn Net Expense Ratio: 0.74 Fund Family: PIMCO



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

2.40

64

3.29

14

10 ۲ 5 0 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last 5 Years Last 10 Years Last 3 Years QTD YTD Last Year

6.87

34

5.85

65

6.31

1.62

97

9

Year to Date

5.50

5.57

6.91

354

83

1 Year

6.87

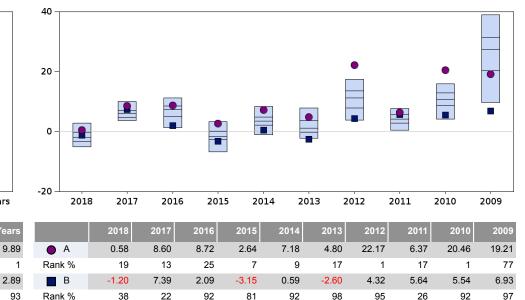
5.85

6.23

342

34

Returns for Calendar Years



PIMCO Income Instl

5.30

1.20

94

1

BBgBarc Global Aggregate TR USD

5.50

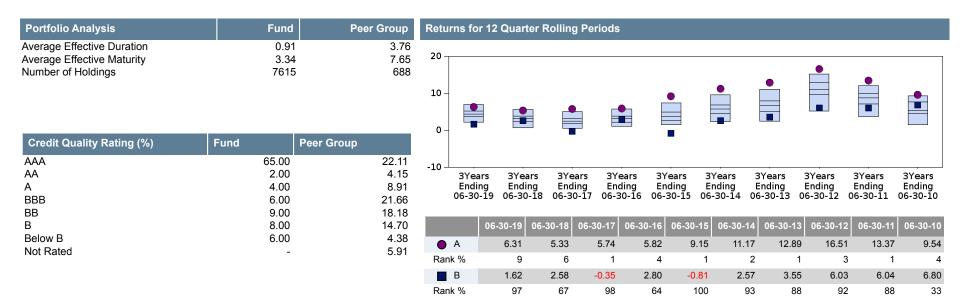
5.57

83

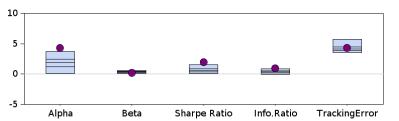
79



Lansing Board of Water & Light 457(b) Deferred Compensation Plan PIMCO Income Instl

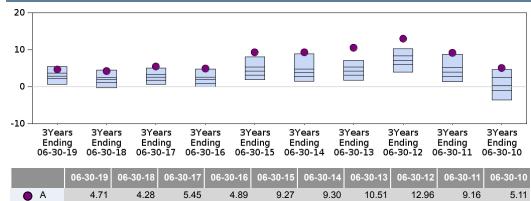


Statistics Relative to BBgBarc Global Aggregate TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	4.26	1.82
Beta	0.17	0.37
Sharpe Ratio	1.94	0.64
Information Ratio	0.95	0.39
RSquared	11.98	24.71
TrackingError	4.31	4.31

Alpha Relative to BBgBarc Global Aggregate TR USD for 12 Quarter Rolling Periods



4

1

3

3

1

2

2

PIMCO Income Instl

BBgBarc Global Aggregate TR USD

6

1

9

Rank %



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® Balanced

Since Inception

Ticker: FBALX

Fund

Peers

#Funds Rank%

Benchmark

Peer Group/Category: Morningstar Allocation--50% to 70% Fund Manager: Steven Kaye Equity Manager Tenure: 10.75 Years Benchmark: Blend (60% S&P 500 TR_40% BC Agg Bond TR Website: www.institutional.fidelity.com USD) Fund Inception Date: 11-06-1986

Year to Date

14.75

13.64

12.21

741

9

3 Year

10.27

9.51

7.79

679

8

1 Year

6.62

9.87

5.73

735

36

5 Year

7.46

7.75

5.04

596

8

10 Year

10.93

10.50

8.93

431

8

Total Fund Assets: \$33.54 bn Net Expense Ratio: 0.53 Fund Family: Fidelity Investments

Net Expense Ratio

FBALX

AvgPeer

Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

Last Quarter

3.70

3.96

2.95

746

19

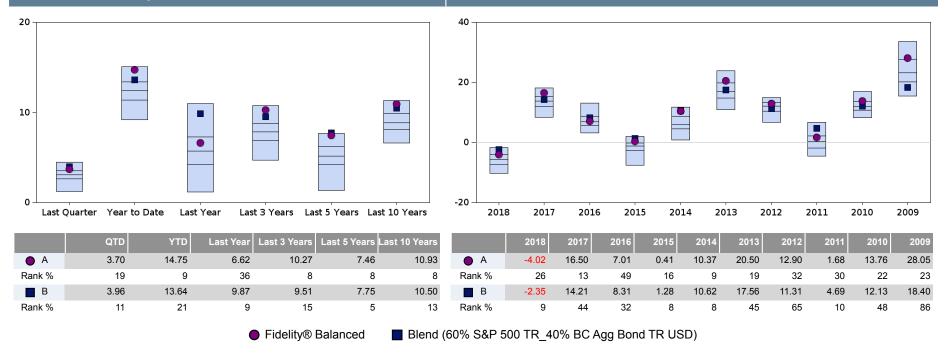
Returns for Calendar Years

9.18

2

1

0

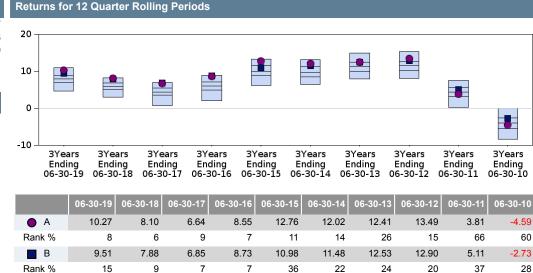


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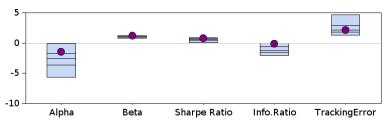


Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® Balanced

Func	d Peer Group	F
17.9	1 17.66	
Fund	Peer Group	
26.61	18.22	
3.53	3.46	
11.30	11.25	-
7.29	7.52	
8.38	10.76	
2.63	3.88	
14.40	16.62	
2.19	5.09	
15.32	12.69	
5.22	7.04	
3.15	3.47	
	62,621.5 17.9 1730.0 Fund 26.61 3.53 11.30 7.29 8.38 2.63 14.40 2.19 15.32 5.22	62,621.52 56,822.17 17.91 17.66 1730.00 511.00 Fund Peer Group 26.61 18.22 3.53 3.46 11.30 11.25 7.29 7.52 8.38 10.76 2.63 3.88 14.40 16.62 2.19 5.09 15.32 12.69 5.22 7.04

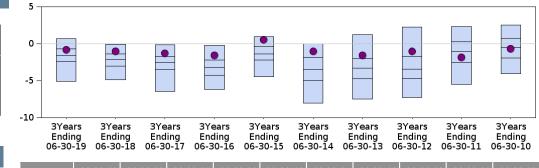


Statistics Relative to Blend (60% S&P 500 TR_40% BC Agg Bond TR USD) for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-1.48	-2.81
Beta	1.19	1.04
Sharpe Ratio	0.77	0.56
Information Ratio	-0.13	-1.07
RSquared	96.47	89.46
TrackingError	2.16	2.63

Alpha Relative to Blend (60% S&P 500 TR_40% BC Agg Bond TR USD) for 12 Quarter Rolling Periods



	06-30-19	06-30-18	06-30-17	06-30-16	06-30-15	06-30-14	06-30-13	06-30-12	06-30-11	06-30-10
Ο Α	-0.83	-1.03	-1.28	-1.59	0.52	-1.06	-1.56	-1.06	-1.87	-0.67
Rank %	29	17	16	17	11	17	22	16	66	53

Fidelity® Balanced

Blend (60% S&P 500 TR_40% BC Agg Bond TR USD)

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Ticker: JDVWX

Peer Group/Category: Morningstar Large Value

Lansing Board of Water & Light 457(b) Deferred Compensation Plan JHancock Disciplined Value R6

Total Fund Assets: \$15.04 bn

Benchmark: Russell 1000 Value TR USD Manager Tenure: 22.41 Years Net Expense Ratio: 0.70 Criteria Criteria Fund Inception Date: 01-02-1997 Website: www.jhfunds.com Fund Family: John Hancock Return 1Yr Yes Last Quarter Year to Date 3 Year 5 Year 10 Year Since Inception Net Expense Ratio 1 Year Return 5Yr Yes 2.96 12.54 11.09 6.89 12.70 8.33 Fund 4.17 2 Expense Ratio Yes 3.84 16.24 8.46 10.19 7.46 13.19 Benchmark 3.02 14.59 5.79 10.12 6.84 12.20 Peers Prod Hist Yes #Funds 1258 1249 1236 1103 956 703 59 85 30 50 38 1 Rank% 67 Manager Tenure Yes AUM Yes Ω Alpha 5Yr No JDVWX AvgPeer Returns for Periods Ending 06/30/2019 **Returns for Calendar Years** 20 50 8 10 8 0 -0-0 ۲ --0 -10 -50 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years 2018 2017 2016 2015 2014 2013 2012 2011 2010 2009 Last Year Last 5 Years Last 10 Years Last Year Last 3 Years QTD YTD 2018 2017 2016 2015 2013 2012 2011 2010 2009 • A 2.96 12.54 4.17 11.09 6.89 12.70 A -9.47 19.33 14.07 -4.81 11.04 35.97 20.08 0.32 13.12 26.26 59 85 67 30 72 55 39 Rank % 50 38 Rank % 63 17 62 18 6 49 64 В 3.84 16.24 8.46 10.19 7.46 В 13.19 -8.27 13.66 17.34 -3.83 13.45 32.53 17.51 0.39 15.51 19.69 Rank % 34 27 31 54 38 25 Rank % 44 78 27 60 17 43 19 48 32 69

JHancock Disciplined Value R6

Fund Manager: Mark Donovan

Russell 1000 Value TR USD

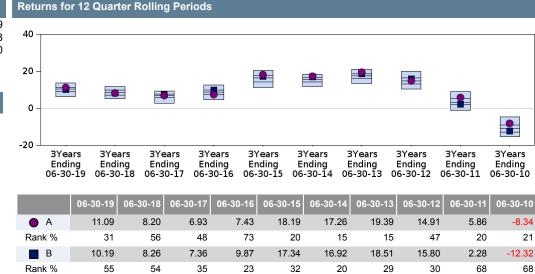
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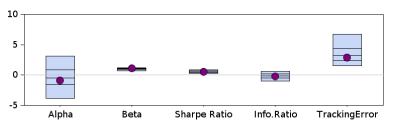


Lansing Board of Water & Light 457(b) Deferred Compensation Plan JHancock Disciplined Value R6

Portfolio Analysis	Fund	Peer Group	F
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	ce/Earning Ratio 17.68		
Sector Weightings (%)	Fund	Peer Group	
Technology	11.20	11.80	
Communication Services	7.31	4.74	
Consumer Cyclical	6.15	8.80	-
Consumer Defensive	5.50	9.26	
Industrials	11.19	9.96	
Basic Materials	5.47	3.10	
Financial Services	24.46	21.02	J
Real Estate	2.14	3.38	
Healthcare	16.21	13.60	
Energy	9.69	9.04	
Utilities	0.68	5.29	

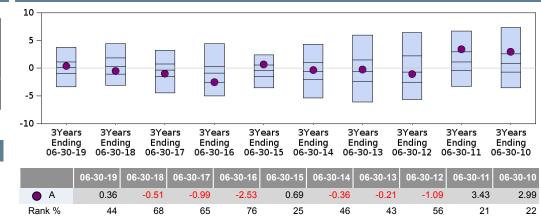


Statistics Relative to Russell 1000 Value TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.89	-0.43
Beta	1.07	0.98
Sharpe Ratio	0.51	0.54
Information Ratio	-0.20	-0.19
RSquared	95.55	90.87
TrackingError	2.87	3.64

Alpha Relative to Russell 1000 Value TR USD for 12 Quarter Rolling Periods



JHancock Disciplined Value R6

Russell 1000 Value TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® 500 Index

Ticker: FXAIX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Large Blend Benchmark: S&P 500 TR USD Fund Inception Date: 05-04-2011

Last Quarter

4.30

4.30

3.82

1463

34

Year to Date

18.54

18.54

17.22

1447

33

1 Year

10.41

10.42

8.22

27

1408

Fund Manager: Louis Bottari Manager Tenure: 10.41 Years Website: www.institutional.fidelity.com

5 Year

10.70

10.71

8.74

1067

11

14.68

14.70

13.24

812

10

3 Year

14.17

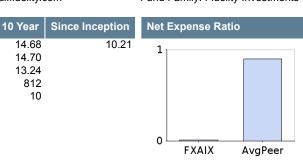
14.19

12.51

1206

18

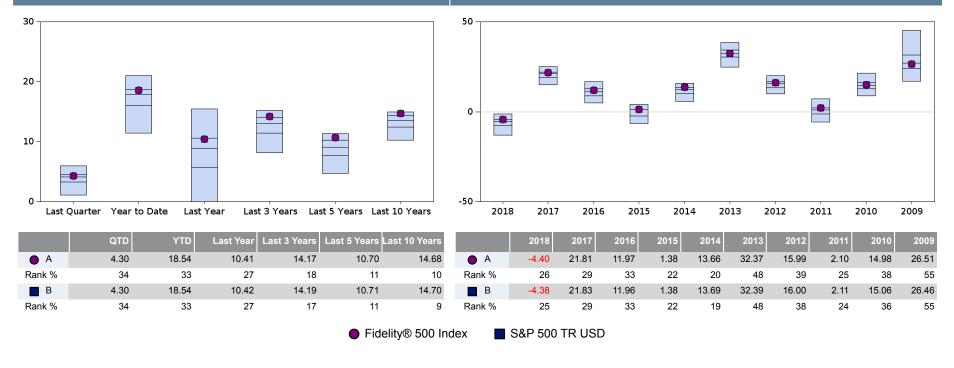
Total Fund Assets: \$198.29 bn Net Expense Ratio: 0.02 Fund Family: Fidelity Investments



Pass Criteria
Yes

Returns for Periods Ending 06/30/2019

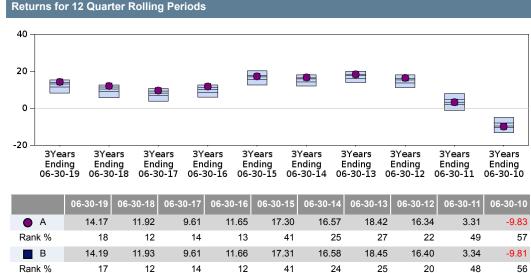
Returns for Calendar Years



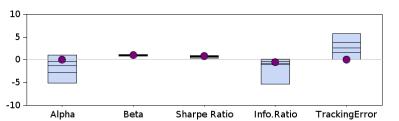


Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® 500 Index

Portfolio Analysis	Fund	Peer Group	ľ
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	ning Ratio 18.85		
Sector Weightings (%)	Fund	Peer Group	
Technology	22.71	20.87	
Communication Services	3.53	3.37	
Consumer Cyclical	12.12	12.12	
Consumer Defensive	7.87	8.50	
Industrials	10.10	11.54	
Basic Materials	2.36	2.72	
Financial Services	16.02	16.30	I
Real Estate	2.79	2.85	Į
Healthcare	14.14	13.49	
Energy	4.94	5.08	
Utilities	3.42	3.16	

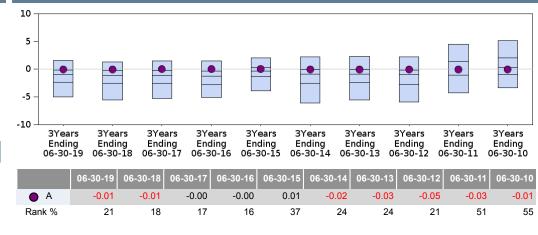


Statistics Relative to S&P 500 TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.01	-1.66
Beta	1.00	0.99
Sharpe Ratio	0.84	0.68
Information Ratio	-0.50	-1.27
RSquared	100.00	93.53
TrackingError	0.02	2.86

Alpha Relative to S&P 500 TR USD for 12 Quarter Rolling Periods



Fidelity® 500 Index

S&P 500 TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® Contrafund®

Ticker: FCNTX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Large Growth Benchmark: Russell 1000 Growth TR USD Fund Inception Date: 05-17-1967

Last Quarter

5.44

4.64

4.63

1414

30

Fund Manager: William Danoff Manager Tenure: 28.75 Years Website: www.institutional.fidelity.com

5 Year

12.53

13.39

11.27

1110

36

10 Year

15.42

16.28

14.67

822

37

3 Year

17.81

18.07

16.92

1245

38

1 Year

7.92

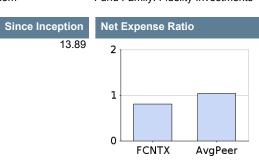
11.56

10.01

1383

73

Total Fund Assets: \$121.77 bn Net Expense Ratio: 0.82 Fund Family: Fidelity Investments



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

5.44

4.64

30

48

7.92

11.56

73

33

17.81

18.07

38

34

Year to Date

20.77

21.49

21.10

1400

55

Returns for Calendar Years



Fidelity® Contrafund®

12.53

13.39

36

22

Russell 1000 Growth TR USD

20.77

21.49

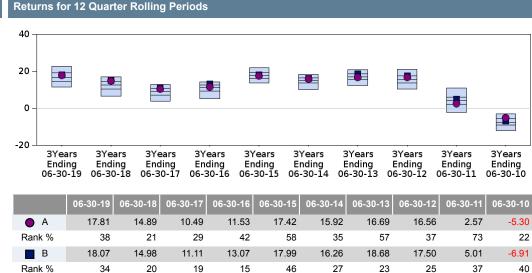
55

43

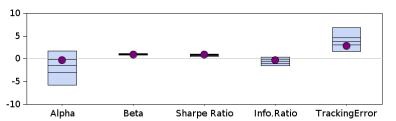


Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® Contrafund®

Portfolio Analysis	Fund	Peer Group	F
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	145,472.11 25.71 328.00	1 25.65	
Sector Weightings (%)	Fund	Peer Group	
Technology	36.39	32.86	
Communication Services	0.95	1.96	
Consumer Cyclical	16.31	17.13	-
Consumer Defensive	3.99	4.81	
Industrials	2.98	9.86	
Basic Materials	1.40	2.06	
Financial Services	22.46	12.93	I
Real Estate	0.31	1.49	
Healthcare	12.99	14.56	
Energy	1.89	1.69	
Utilities	0.35	0.66	

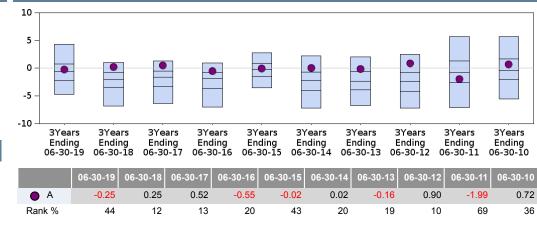


Statistics Relative to Russell 1000 Growth TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.29	-1.69
Beta	0.96	0.99
Sharpe Ratio	0.92	0.80
Information Ratio	-0.30	-0.59
RSquared	95.32	90.68
TrackingError	2.82	4.08

Alpha Relative to Russell 1000 Growth TR USD for 12 Quarter Rolling Periods



● Fidelity[®] Contrafund[®]

Russell 1000 Growth TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan MainStay Large Cap Growth I

Ticker: MLAIX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Large Growth Benchmark: Russell 1000 Growth TR USD Fund Inception Date: 07-03-1995

Last Quarter

4.65

4.64

4.63

1414

48

Year to Date

23.04

21.49

21.10

1400

25

1 Year

11.86

11.56

10.01

1383

30

Fund Manager: Justin Kelly Manager Tenure: 13.66 Years Website: www.mainstayinvestments.com

5 Year

13.44

13.39

11.27

1110

21

3 Year

20.02

18.07

16.92

1245

18

10 Year

15.63

16.28

14.67

822

31

Total Fund Assets: \$11.93 bn Net Expense Ratio: 0.73 Fund Family: MainStay



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

4.65

4.64

48

48

30 20 10 0 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last 5 Years Last 10 Years Last 3 Years QTD YTD Last Year

11.86

11.56

30

33

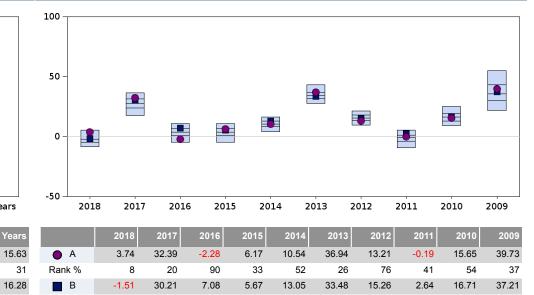
20.02

18.07

18

34

Returns for Calendar Years



MainStay Large Cap Growth I

22

13.44

13.39

21

31

18

Russell 1000 Growth TR USD

33

24

37

60

26

53

17

43

43

43

23.04

21.49

25

43

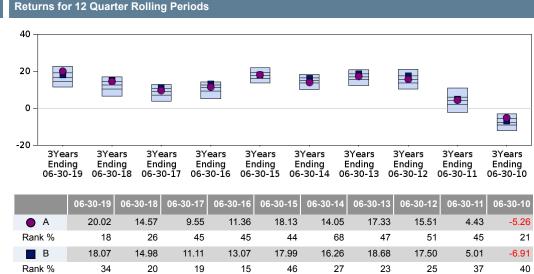
FOR CLIENT USE ONLY.

Rank %

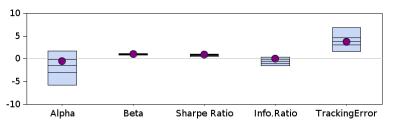


Lansing Board of Water & Light 457(b) Deferred Compensation Plan MainStay Large Cap Growth I

Portfolio Analysis	Fund	Peer Group F
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	140,843.14 34.25 52.00	25.65
Sector Weightings (%)	Fund	Peer Group
Technology Communication Services Consumer Cyclical Consumer Defensive Industrials Basic Materials Financial Services Real Estate Healthcare Energy	35.97 0.00 23.62 0.00 9.16 2.62 13.20 1.20 14.23 0.00	32.86 1.96 17.13 4.81 9.86 2.06 12.93 1.49 14.56 1.69
Utilities	0.00	0.66

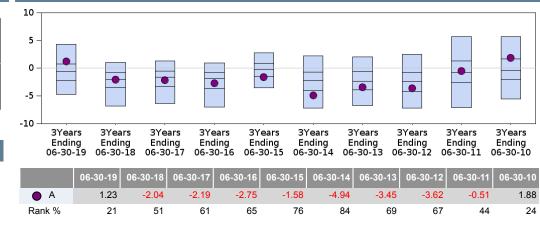


Statistics Relative to Russell 1000 Growth TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.46	-1.69
Beta	1.05	0.99
Sharpe Ratio	0.90	0.80
Information Ratio	0.01	-0.59
RSquared	93.14	90.68
TrackingError	3.78	4.08

Alpha Relative to Russell 1000 Growth TR USD for 12 Quarter Rolling Periods



MainStay Large Cap Growth I

Russell 1000 Growth TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® Mid Cap Index

Returns for Calendar Years

Ticker: FSMDX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Mid-Cap Blend Benchmark: Russell Mid Cap TR USD Fund Inception Date: 09-08-2011

Last Quarter

4.14

4.13

3.04

443

30

Year to Date

21.36

21.35

17.52

442

11

Fund Manager: Louis Bottari Manager Tenure: 7.75 Years Website: www.institutional.fidelity.com

5 Year

8.64

8.63

6.04

312

14

15.16

12.87

228

3 Year

12.16

12.16

9.98

362

26

1 Year

7.88

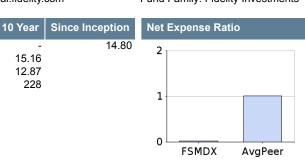
7.83

2.41

437

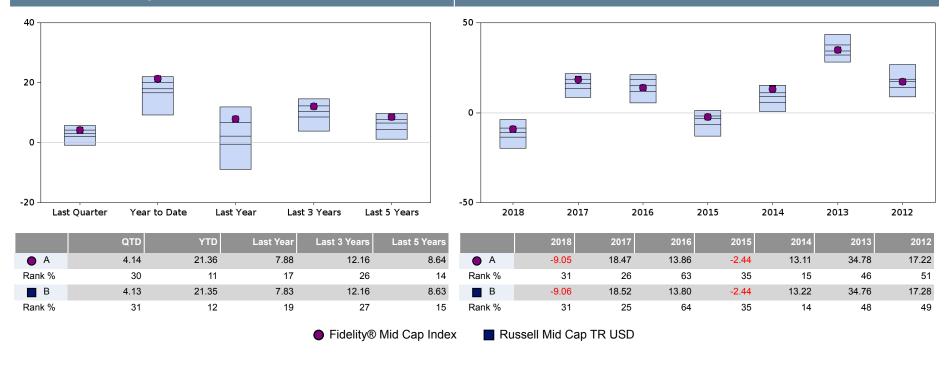
17

Total Fund Assets: \$10.32 bn Net Expense Ratio: 0.02 Fund Family: Fidelity Investments



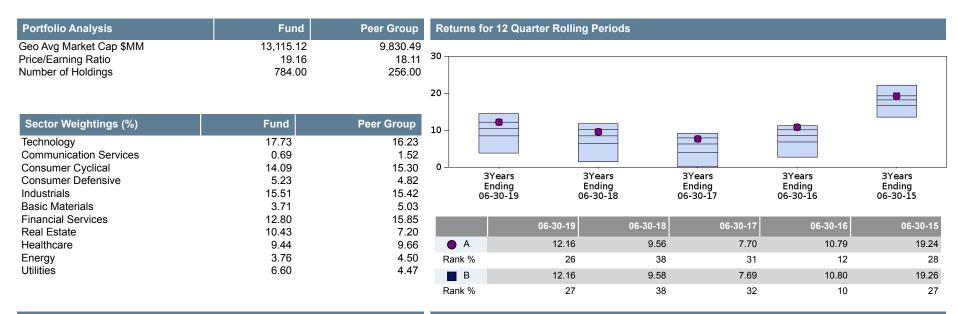
Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® Mid Cap Index



Statistics Relative to Russell Mid Cap TR USD for 5 Years

Risk Measures 5 Yr

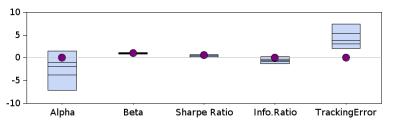
Information Ratio

RSquared

TrackingError

Alpha

Beta Sharpe Ratio



Fund

0.02

1.00

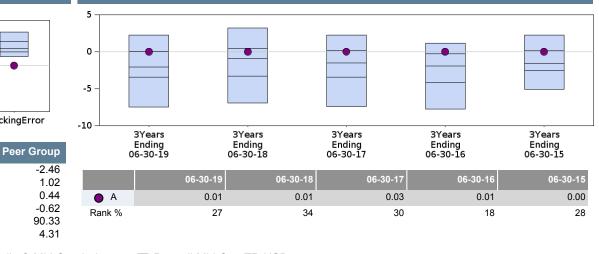
0.64

0.05

0.08

100.00

Alpha Relative to Russell Mid Cap TR USD for 12 Quarter Rolling Periods



Fidelity® Mid Cap Index

Russell Mid Cap TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan JPMorgan Mid Cap Value R6

Ticker: JMVYX

Fund

Peers #Funds

Rank%

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Mid-Cap Value Benchmark: Russell Mid Cap Value TR USD Fund Inception Date: 11-13-1997

Last Quarter

3.10

3.19

2.52

421

45

Fund Manager: Jonathan Simon Manager Tenure: 21.58 Years Website: www.jpmorganfunds.com

5 Year

7.18

6.72

5.57

321

21

10 Year

14.40

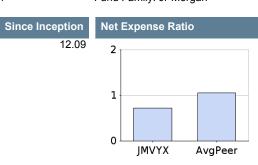
14.56

12.75

217

11

Total Fund Assets: \$17.03 bn Net Expense Ratio: 0.73 Fund Family: JPMorgan



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

45

41

3.19

30 20 O 10 0 -10 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year Last 3 Years Last 5 Years Last 10 Years QTD YTD Last Year • A 3.10 18.23 4.63 8.51 7.18 14.40

18

25

3.68

64

8.95

55

Year to Date

18.23

18.02

15.80

419

27

1 Year

4.63

3.68

0.25

415

18

3 Year

8.51

8.95

8.73

363

64

Returns for Calendar Years



JPMorgan Mid Cap Value R6

21

6.72

29

Russell Mid Cap Value TR USD

52

41

48

48

10

65

25

27

18

58

27

30

18.02

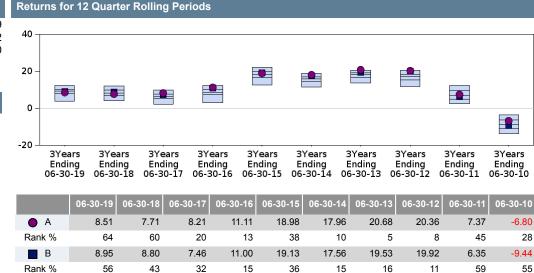
Rank %

9

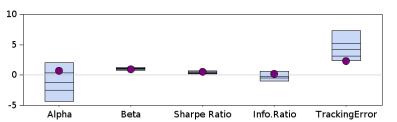


Lansing Board of Water & Light 457(b) Deferred Compensation Plan JPMorgan Mid Cap Value R6

Portfolio Analysis	Fund	Peer Group	F
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	14,021.80 16.56 110.00	15.62	
Sector Weightings (%)	Fund	Peer Group	
Technology	8.39	11.00	
Communication Services	1.21	0.71	
Consumer Cyclical	17.05	15.05	-
Consumer Defensive	4.21	5.84	
Industrials	6.46	14.08	
Basic Materials	2.55	5.21	
Financial Services	23.47	20.54	Т
Real Estate	13.02	7.69	
Healthcare	6.68	7.73	
Energy	7.21	6.12	
Utilities	9.75	6.02	

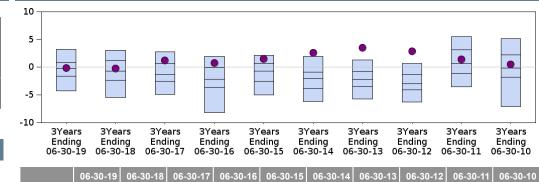


Statistics Relative to Russell Mid Cap Value TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	0.70	-1.20
Beta	0.95	1.04
Sharpe Ratio	0.55	0.41
Information Ratio	0.20	-0.25
RSquared	96.72	90.70
TrackingError	2.32	4.39

Alpha Relative to Russell Mid Cap Value TR USD for 12 Quarter Rolling Periods



	00-30-13	00-30-10	00-30-17	00-30-10	00-30-13	00-30-14	00-30-13	00-30-12	00-30-11	00-30-10
Ο Α	-0.13	-0.23	1.22	0.73	1.53	2.60	3.48	2.89	1.44	0.53
Rank %	48	44	20	11	16	3	2	3	42	40

JPMorgan Mid Cap Value R6

Russell Mid Cap Value TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan T. Rowe Price Instl Mid-Cap Equity Gr

Ticker: PMEGX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Mid-Cap Growth Benchmark: Russell Mid Cap Growth TR USD Fund Inception Date: 07-31-1996

Last Quarter

7.26

5.40

5.61

610

24

Fund Manager: Brian Berghuis Manager Tenure: 22.91 Years Website: www.troweprice.com

5 Year

13.56

11.10

9.78

484

8

3 Year

17.52

16.49

15.59

539

30

10 Year

17.68

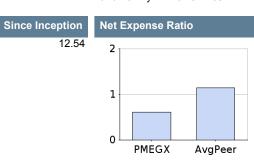
16.02

14.53

367

3

Total Fund Assets: \$7.98 bn Net Expense Ratio: 0.61 Fund Family: T. Rowe Price



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

QTD

7.26

24

5.40

57

40 8 20 ۲ 0 -20 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year

Last Year

16.66

13.94

14

30

Last 3 Years

17.52

16.49

30

38

Year to Date

25.41

26.08

24.97

609

52

1 Year

16.66

13.94

9.88

602

14

Returns for Calendar Years



T. Rowe Price Instl Mid-Cap Equity Gr

13.56

11.10

31

19

8

Russell Mid Cap Growth TR USD

38

51

14

49

40

41

42

23

39

YTD

25.41

26.08

52

44

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Rank %

38

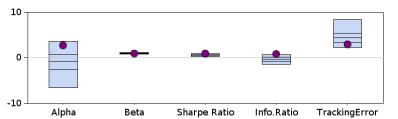


Lansing Board of Water & Light 457(b) Deferred Compensation Plan T. Rowe Price Instl Mid-Cap Equity Gr

Portfolio Analysis	Fund	Peer Group	Retu	rns for 12	2 Quarte	r Rolling	Periods	;	
Geo Avg Market Cap \$MM	14,089.93	11,993.10	40 -						
Price/Earning Ratio Number of Holdings	24.46 136.00	27.11 111.00	40						
			20 –						
Sector Weightings (%)	Fund	Peer Group	0						
Technology	23.03	28.38							
Communication Services	0.00	0.98							
Consumer Cyclical	13.90	16.05	-20 –			,			
Consumer Defensive	6.42	3.97		3Years Ending	3Years Ending				BYears Ending
Industrials	21.15	17.28		06-30-19					5-30-15
Basic Materials	3.16	2.48							
Financial Services	8.19	8.82				0 00 40	00 00 4 7	00.00.44	
Real Estate	0.93	4.83		06	-30-19 0	6-30-18	06-30-17	06-30-16	6 06-3
Healthcare	18.39	15.13	•	A	17.52	11.88	12.07	14.01	1 2
Energy	3.49	1.48	Rar	ık %	30	24	3	1	1
Utilities	1.35	0.61		В	16.49	10.73	7.83	10.52	2 1
			Ran	ık %	38	39	35	27	7

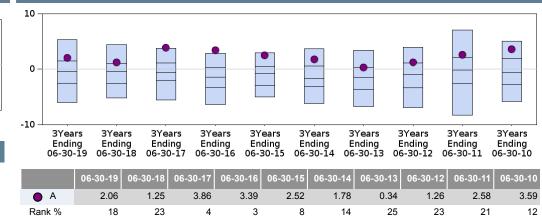


Statistics Relative to Russell Mid Cap Growth TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	2.73	-1.05
Beta	0.94	0.99
Sharpe Ratio	0.96	0.67
Information Ratio	0.83	-0.40
RSquared	95.48	89.58
TrackingError	2.95	4.71

Alpha Relative to Russell Mid Cap Growth TR USD for 12 Quarter Rolling Periods



T. Rowe Price Instl Mid-Cap Equity Gr

Russell Mid Cap Growth TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan American Beacon Small Cap Value R6

Ticker: AASRX

Fund

Peers #Funds

Rank%

Rank %

Benchmark

Peer Group/Category: Morningstar Small Value Benchmark: Russell 2000 Value TR USD Fund Inception Date: 12-31-1998

Last Quarter

1.78

1.37

0.63

425

36

Fund Manager: James Miles Manager Tenure: 20.50 Years Website: www.americanbeaconfunds.com

5 Year

4.77

5.39

3.59

337

33

13.05

12.40

11.65

226

21

3 Year

8.62

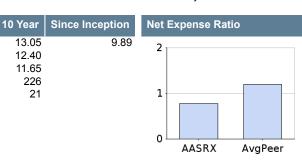
9.81

7.69

379

36

Total Fund Assets: \$6.33 bn Net Expense Ratio: 0.78 Fund Family: American Beacon



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

47

20 0 -20 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years Last 5 Years Last 10 Years Last Year Last 3 Years QTD YTD • A 1.78 14.21 -7.61 8.62 4.77 13.05 36 56 33 Rank % 36 36 21 В 1.37 13.47 -6.24 9.81 5.39

38

20

Year to Date

14.21

13.47

12.92

425

36

1 Year

-7.61

-6.24

-8.05

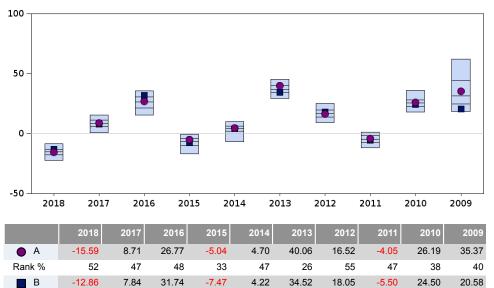
417

56

Returns for Calendar Years

-12.86

26



34.52

71

52

18.05

41

-5.50

59

24.50

63

20.58

89

American Beacon Small Cap Value R6

24

12.40

38

Russell 2000 Value TR USD

31.74

13

-7.47

60

7.84

57

51

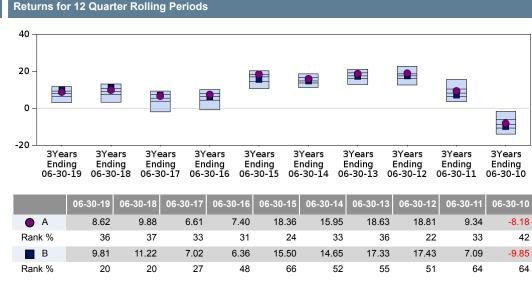
FOR CLIENT USE ONLY.

Rank %

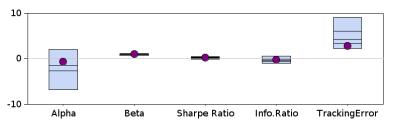


Lansing Board of Water & Light 457(b) Deferred Compensation Plan American Beacon Small Cap Value R6

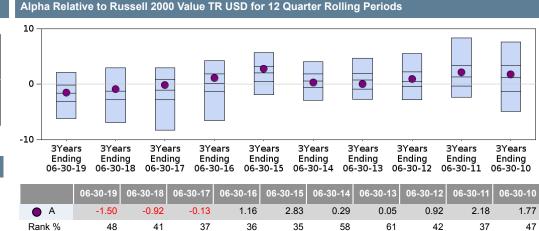
Portfolio Analysis	Fund	Peer Group	Returns
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	2,373.01 13.90 536.00	13.92	40
			20 –
Sector Weightings (%)	Fund	Peer Group	0
Technology Communication Services	14.47	11.34 0.67	
Consumer Cyclical	14.83	14.48	-20
Consumer Defensive	2.35	4.01	3
Industrials	20.07	16.72	06
Basic Materials	5.97	6.72	
Financial Services	28.52	24.37	
Real Estate	4.27	8.93	
Healthcare	2.38	4.03	Ο Α
Energy	4.56	5.17	Rank %
Utilities	2.40	3.57	B







Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.64	-1.48
Beta	1.03	0.97
Sharpe Ratio	0.31	0.25
Information Ratio	-0.22	-0.32
RSquared	97.36	90.21
TrackingError	2.83	5.27



American Beacon Small Cap Value R6

Russell 2000 Value TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® Small Cap Index

Returns for Calendar Years

Ticker: FSSNX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Small Blend Benchmark: Russell 2000 TR USD Fund Inception Date: 09-08-2011

Last Quarter

2.13

2.10

2.21

749

50

Year to Date

17.00

16.98

15.74

745

37

Fund Manager: Louis Bottari Manager Tenure: 7.75 Years Website: www.institutional.fidelity.com

5 Year

7.28

7.06

5.65

516

23

13.45

12.70

375

3 Year

12.46

12.30

10.09

633

16

1 Year

-3.21

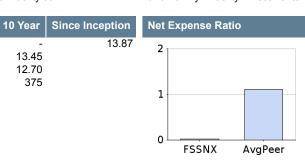
-3.31

-3.76

733

43

Total Fund Assets: \$9.40 bn Net Expense Ratio: 0.02 Fund Family: Fidelity Investments



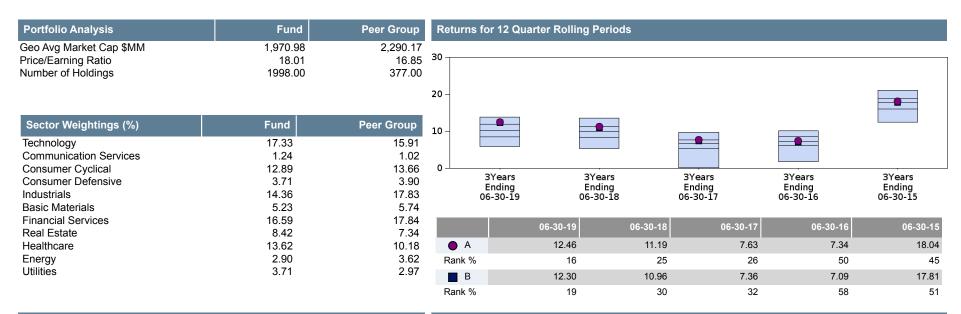
Pass Criteria
Yes

Returns for Periods Ending 06/30/2019

40 50 20 -0-_ 0 -0 • -20 -50 Year to Date Last Year Last 3 Years Last 5 Years 2018 2017 2016 2015 2014 2013 2012 Last Quarter Last Year Last 3 Years Last 5 Years 2018 2016 2015 2013 2012 YTD • A 2.13 17.00 -3.21 12.46 7.28 Ο Α -10.88 14.85 21.63 -4.24 5.19 39.02 16.38 Rank % 50 37 43 16 23 Rank % 35 23 44 48 49 45 44 2.10 16.98 -3.31 12.30 -11.01 14.65 21.31 -4.41 4.89 38.82 16.35 **B** 7.06 B Rank % 52 38 46 19 28 Rank % 38 26 53 53 51 47 44 Fidelity® Small Cap Index Russell 2000 TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Fidelity® Small Cap Index



Statistics Relative to Russell 2000 TR USD for 5 Years

Risk Measures 5 Yr

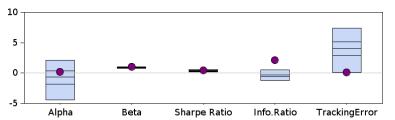
Information Ratio

RSquared

TrackingError

Alpha

Beta Sharpe Ratio



Fund

0.20

1.00

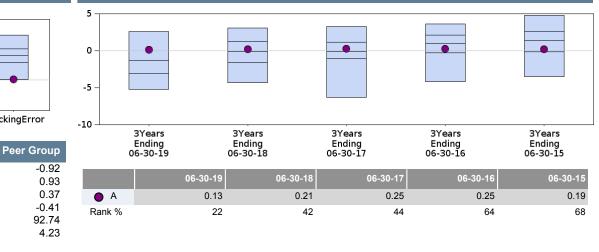
0.45

2.11

0.10

100.00

Alpha Relative to Russell 2000 TR USD for 12 Quarter Rolling Periods



Fidelity® Small Cap Index

Russell 2000 TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan AMG TimesSquare Small Cap Growth N

Ticker: TSCPX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Small Growth Benchmark: Russell 2000 Growth TR USD Fund Inception Date: 01-21-2000

Last Quarter

4.35

2.75

4.12

684

45

Fund Manager: Grant Babyak Manager Tenure: 19.41 Years Website: www.amgfunds.com

3 Year

16.15

14.69

16.03

585

47

5 Year

10.34

8.63

9.17

516

36

10 Year

15.25

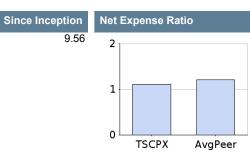
14.41

14.46

395

36

Total Fund Assets: \$1.04 bn Net Expense Ratio: 1.11 Fund Family: AMG Funds



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

4.35

45

67

2.75

40 20 0 -20 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year Last 3 Years Last 5 Years Last 10 Years QTD YTD Last Year

8.34

-0.49

25

69

16.15

14.69

47

60

Year to Date

25.63

20.36

21.82

683

28

1 Year

8.34

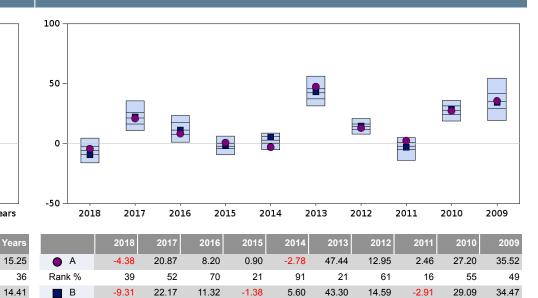
-0.49

3.22

672

25

Returns for Calendar Years



61 AMG TimesSquare Small Cap Growth N

10.34

36

8.63

Russell 2000 Growth TR USD

50

43

26

42

43

56

39

55

46

25.63

20.36

28

60

Rank %

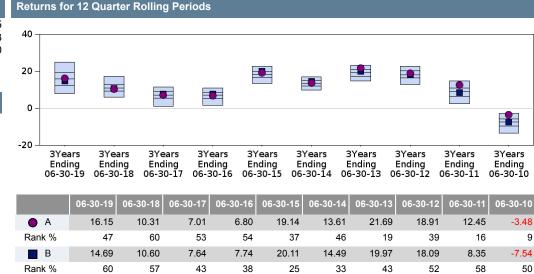
74

55

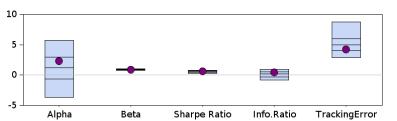


Lansing Board of Water & Light 457(b) Deferred Compensation Plan AMG TimesSquare Small Cap Growth N

Portfolio Analysis	Fund	Peer Group	F
Geo Avg Market Cap \$MM	2,400.26	2,981.95	
Price/Earning Ratio	26.31	24.83	
Number of Holdings	103.00	166.00	
Sector Weightings (%)	Fund	Peer Group	
Technology	31.02	27.08	
Communication Services	2.81	0.86	
Consumer Cyclical	11.21	13.74	-
Consumer Defensive	7.19	4.63	
Industrials	21.82	15.78	
Basic Materials	1.68	3.98	
Financial Services	6.69	8.40	Т
Real Estate	3.06	3.15	J.
Healthcare	12.26	20.00	
Energy	2.24	1.67	
Utilities	0.00	0.72	

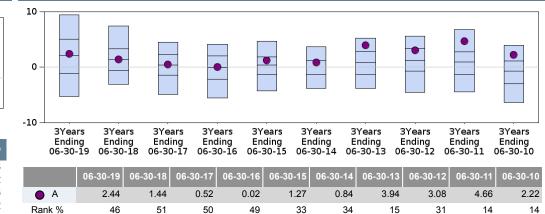


Statistics Relative to Russell 2000 Growth TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	2.32	1.08
Beta	0.89	0.92
Sharpe Ratio	0.65	0.56
Information Ratio	0.41	0.12
RSquared	94.37	90.62
TrackingError	4.24	5.29

Alpha Relative to Russell 2000 Growth TR USD for 12 Quarter Rolling Periods



AMG TimesSquare Small Cap Growth N

Russell 2000 Growth TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan **Oakmark International Advisor**

Ticker: OAYIX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Foreign Large Value Benchmark: MSCI EAFE NR USD Fund Inception Date: 09-30-1992

Last Quarter

3.36

3.68

1.71

356

8

Fund Manager: David Herro Manager Tenure: 26.75 Years Website: www.oakmark.com

5 Year

1.54

2.25

0.08

238

14

10 Year

9.07

6.90

5.67

161

4

3 Year

10.64

9.11

6.84

297

3

1 Year

-6.42

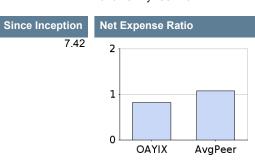
1.08

-2.01

339

92

Total Fund Assets: \$33.01 bn Net Expense Ratio: 0.83 Fund Family: Oakmark



Criteria	Pass Criteria
Return 1Yr	No
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

QTD

3.36

3.68

8

6

20 10 0 -10 Last Quarter Year to Date Last Year Last 3 Years Last 5 Years Last 10 Years

Last Year

-6.42

92

1.08

17

Last 3 Years

10.64

3

9.11

14

Year to Date

12.78

14.03

10.51

354

12

Returns for Calendar Years



Oakmark International Advisor

18

1.54

14

9

2.25

26 MSCI EAFE NR USD

77

23

38

37

48

51

54

49

30

YTD

12.78

14.03

12

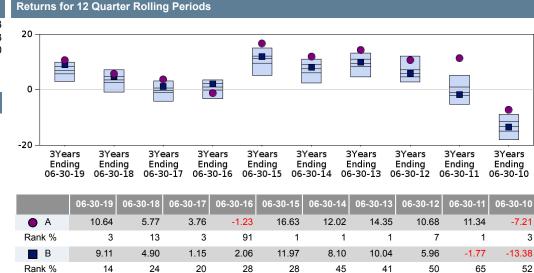
5

Rank %

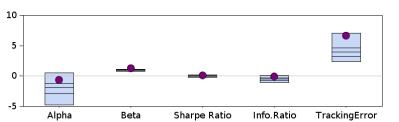


Lansing Board of Water & Light 457(b) Deferred Compensation Plan Oakmark International Advisor

Portfolio Analysis	Fund	Peer Group	F
Geo Avg Market Cap \$MM Price/Earning Ratio	29,416.12 12.72	26,516.43 12.13	
Number of Holdings	82.00	212.00	
International Exposure (%)	Fund	Peer Group	
United States	6.00	2.60	
Latin America	0.92	1.48	
Canada	1.71	4.11	-
United Kingdom	18.97	18.54	
Europe	55.56	39.38	
Africa	2.23	0.35	
Middle East	0.00	0.55	I
Japan	5.26	17.91	
Australia	2.09	3.80	
Asia	7.24	11.28	
Not Classified	0.00	-	

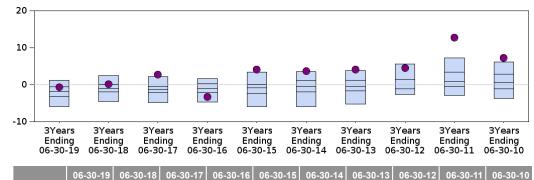


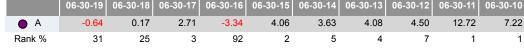
Statistics Relative to MSCI EAFE NR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.65	-2.04
Beta	1.26	0.97
Sharpe Ratio	0.12	-
Information Ratio	-0.11	-0.53
RSquared	87.71	89.07
TrackingError	6.64	4.18

Alpha Relative to MSCI EAFE NR USD for 12 Quarter Rolling Periods





Oakmark International Advisor

MSCI EAFE NR USD

plante moran | Financial Advisors



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Total Intl Stock Index Admiral

Ticker: VTIAX

Fund

Peers

#Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Foreign Large Blend Benchmark: FTSE Global All Cap ex US TR USD Fund Inception Date: 04-29-1996

Last Quarter

2.82

2.99

2.98

759

62

Year to Date

13.35

13.58

13.58

746

58

1 Year

0.64

0.81

-0.05

722

41

Fund Manager: Michael Perre Manager Tenure: 10.83 Years Website: www.vanguard.com

5 Year

2.33

2.70

2.03

488

35

3 Year

8.97

9.51

8.13

611

29

10 Year

6.60

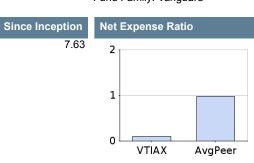
7.26

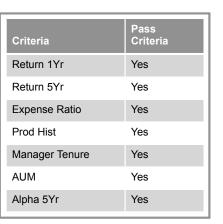
6.44

366

50

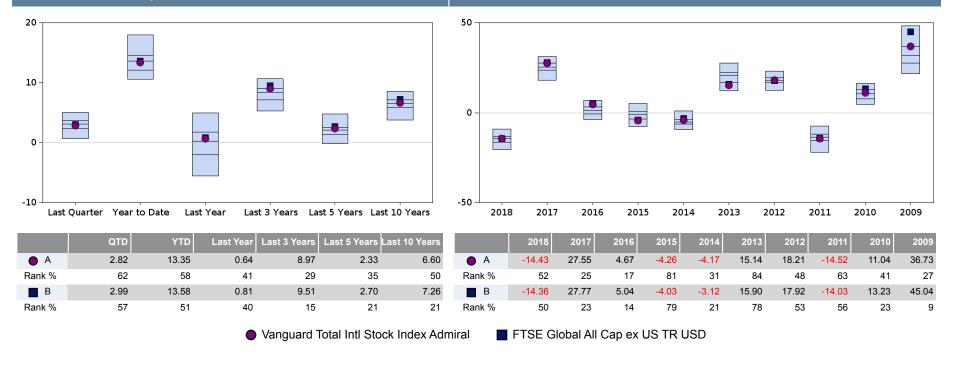
Total Fund Assets: \$381.62 bn Net Expense Ratio: 0.11 Fund Family: Vanguard





Roturns	for	Pariode	Ending	06/30/2019
Returns	101	renous	Enung	00/30/2019

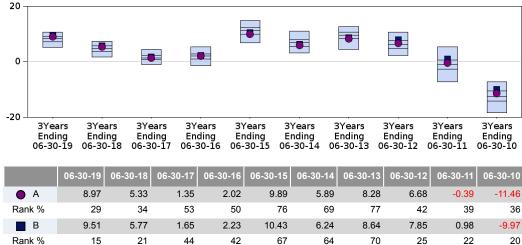
Returns for Calendar Years



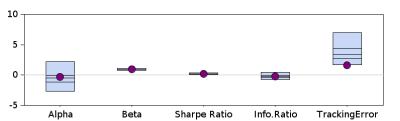


Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Total Intl Stock Index Admiral

Portfolio Analysis	Fund	Peer Group	Retu	rns for 1	2 Quarter	Rolling	Periods	;	
Geo Avg Market Cap \$MM	21,962.75	30,440.89	20 –						
Price/Earning Ratio Number of Holdings	13.74 6368.00	14.71 467.00	20						
		401.00	0 –						•
International Exposure (%)	Fund	Peer Group							
United States	1.10	3.62							
Latin America	3.07	1.53							
Canada	6.93	3.38	-20 –	-	-	-	-		-
United Kingdom	11.25	14.92		3Years Ending	3Years Ending				3Years Ending
Europe	30.82	40.31		06-30-19					6-30-15
Africa	1.58	0.50							
Middle East	1.18	0.45		0.0	6-30-19 0	6-30-18	00 00 47	06-30-1	6 06-3
Japan	17.04	17.87		06	5-30-19 00	5-30-18	06-30-17	06-30-1	6 06-3
Australia	4.63	3.91	•	A	8.97	5.33	1.35	2.0	2
Asia	22.42	13.51	Ran	k %	29	34	53	5	0
Not Classified	0.00	-		В	9.51	5.77	1.65	2.2	3 1
			Ran	k %	15	21	44	4	2

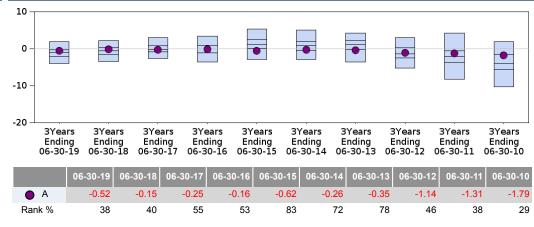


Statistics Relative to FTSE Global All Cap ex US TR USD for 5 Years



Risk Measures 5 Yr	Fund	Peer Group
Alpha	-0.32	-0.53
Beta	0.98	0.94
Sharpe Ratio	0.18	0.16
Information Ratio	-0.23	-0.22
RSquared	98.38	91.17
TrackingError	1.58	3.68

Alpha Relative to FTSE Global All Cap ex US TR USD for 12 Quarter Rolling Periods



Vanguard Total Intl Stock Index Admiral

FTSE Global All Cap ex US TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan American Funds Europacific Growth R6

Ticker: RERGX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Foreign Large Blend Benchmark: MSCI EAFE NR USD Fund Inception Date: 04-16-1984

Last Quarter

3.87

3.68

2.98

759

18

Fund Manager: Mark Denning Manager Tenure: 27.50 Years Website: www.americanfunds.com

5 Year

4.45

2.25

2.03

488

6

3 Year

10.84

9.11

8.13

611

4

10 Year

8.15

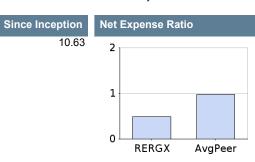
6.90

6.44

366

7

Total Fund Assets: \$161.66 bn Net Expense Ratio: 0.49 Fund Family: American Funds



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

3.87

18

24

3.68

20 10 -_ 0 -10 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year Last 3 Years Last 5 Years Last 10 Years QTD YTD Last Year

1.91

23

1.08

37

10.84

4

9.11

25

Year to Date

17.59

14.03

13.58

746

6

1 Year

1.91

1.08

-0.05

722

23

Returns for Calendar Years



American Funds Europacific Growth R6

35

4.45

2.25

39

6

MSCI EAFE NR USD

56

48

21

46

63

29

73

50

58

17.59

14.03

6

39

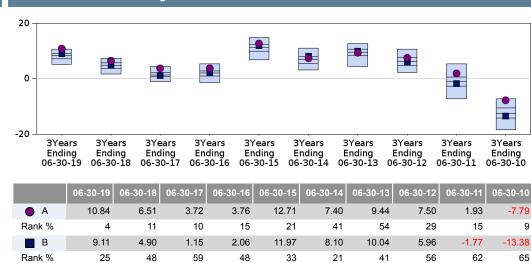
Rank %

37



Lansing Board of Water & Light 457(b) Deferred Compensation Plan American Funds Europacific Growth R6

Portfolio Analysis	Fund	Peer Group	Returns for	or 12 Quar	ter Rollin	g Periods	5
Geo Avg Market Cap \$MM	43,954.74	30,440.89					
Price/Earning Ratio	15.65	14.71	20				
Number of Holdings	342.00	467.00					
International Exposure (%)	Fund	Peer Group	0				
United States	1.42	3.62					
Latin America	6.02	1.53					
Canada	4.06	3.38	-20				,
United Kingdom	10.09	14.92	3Ye End			ears 3Y ding En	
Europe	27.59	40.31	06-30			30-17 06-3	
Africa	0.74	0.50					
Middle East	0.89	0.45		06-30-19	06-30-18	06-30-17	۱,
Japan	13.63	17.87		00-30-19	00-30-10	00-30-17	
Australia	0.90	3.91	Ο Α	10.84	6.51	3.72	
Asia	34.65	13.51	Rank %	4	11	10	
Not Classified	0.00	-	B	9.11	4.90	1.15	
				0.11	1.00	1.10	



Statistics Relative to MSCI EAFE NR USD for 5 Years

Risk Measures 5 Yr

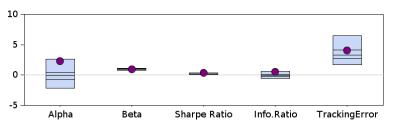
Information Ratio

RSquared

TrackingError

Alpha

Beta Sharpe Ratio



Fund

2.25

0.94

0.35

0.55

89.51

4.02

nha Relative to l	MSCI EAFE NR USD	for 12 Quarter	Rolling Periods



American Funds Europacific Growth R6

Peer Group

-0.12

0.95

0.16

-0.07

91.59

3.56

Alı

MSCI EAFE NR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard International Growth Adm

Ticker: VWILX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Foreign Large Growth Benchmark: MSCI EAFE Growth NR USD Fund Inception Date: 09-30-1981

Last Quarter

3.23

5.73

4.81

483

84

Fund Manager: James Anderson Manager Tenure: 16.33 Years Website: www.vanguard.com

3 Year

15.36

9.68

9.63

396

4

5 Year

6.78

4.39

4.09

336

11

10 Year

10.10

8.23

8.18

250

11

Total Fund Assets: \$37.11 bn Net Expense Ratio: 0.32 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	No
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

QTD

3.23

5.73

84

31

30 20 10 -----0 -10 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year

Last Year

-0.40

76

28

4.24

Last 3 Years

15.36

4

9.68

43

Year to Date

18.63

18.47

18.29

479

47

1 Year

-0.40

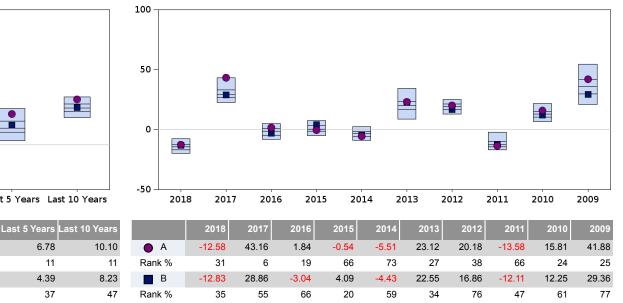
4.24

2.25

465

76

Returns for Calendar Years	



Vanguard International Growth Adm

6.78

11

37

4.39

MSCI EAFE Growth NR USD

YTD

18.63

18.47

47

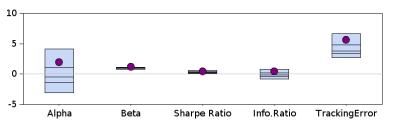
48



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard International Growth Adm

Portfolio Analysis	Fund	Peer Group	Returns fo	r 12 Quarte	r Rolling F	Periods							
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	56,738.78 20.21 126.00	32,931.49 21.07 116.00	20			•			F	•			
International Exposure (%)	Fund	Peer Group	0										
United States Latin America	11.35 3.03	7.59 2.25											
Canada	1.03	4.64	-20 ⊥	rs 3Year	s 3Year	s 3Yea	rs 3Yea	ars 3Ye	ars 3	8Years	3Years	3Years	3Years
United Kingdom Europe	8.83 34.43	13.59 37.17	Endi 06-30	ng Endin	g Ending	g Endir	ng Endi	ng End	ing E	Ending	Ending	Ending	Ending 06-30-10
Africa	0.00	0.69											
Middle East Japan	0.00 10.89	0.49 13.19		06-30-19	6-30-18 0	6-30-17 0	6-30-16 0	6-30-15 0	6-30-14	06-30-13	06-30-12	2 06-30-11	06-30-10
Australia	0.39	2.64	Ο Α	15.36	12.26	5.11	4.14	12.40	7.65	10.44	9.35	5 2.07	-9.91
Asia	30.04	17.73	Rank %	4	3	15	33	35	54	61	49	28	41
Not Classified	0.00	-	B	9.68	6.41	2.81	4.17	12.11	7.68	10.85	7.62	-1.85	-11.70
			Rank %	44	43	46	32	40	54	52	70) 76	59





Risk Measures 5 Yr	Fund	Peer Group
Alpha	1.94	-0.12
Beta	1.18	0.97
Sharpe Ratio	0.45	0.31
Information Ratio	0.43	-0.11
RSquared	88.72	88.94
TrackingError	5.60	4.22



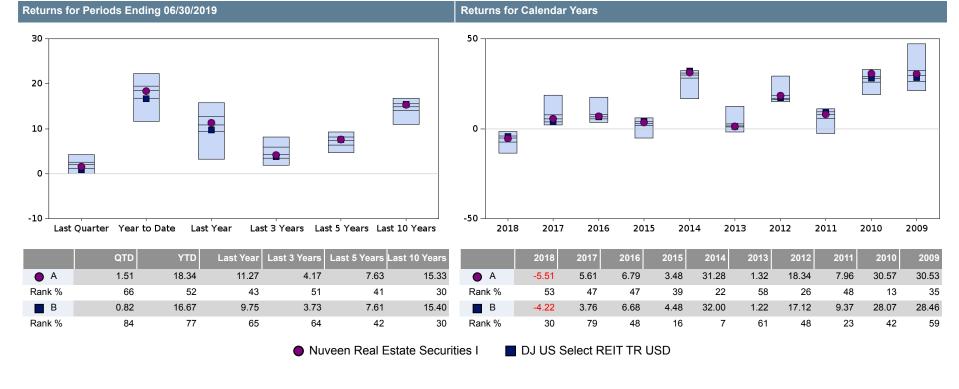
Vanguard International Growth Adm

MSCI EAFE Growth NR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Nuveen Real Estate Securities I

Ticker: FARCX Peer Group/Category: Morningstar Real Estate Fund Manager: Jay Rosenberg Total Fund Assets: \$3.39 bn Pass Benchmark: DJ US Select REIT TR USD Manager Tenure: 14.08 Years Net Expense Ratio: 1.02 Criteria Criteria Fund Inception Date: 06-30-1995 Website: www.nuveen.com Fund Family: Nuveen Return 1Yr Yes Last Quarter Year to Date 5 Year 10 Year Since Inception Net Expense Ratio 1 Year 3 Year Return 5Yr Yes 1.51 11.27 4.17 7.63 15.33 11.44 Fund 18.34 2 Expense Ratio Yes 0.82 16.67 9.75 3.73 7.61 15.40 Benchmark 1.93 18.33 10.45 4.66 7.23 14.53 Peers Prod Hist Yes #Funds 271 267 259 226 198 139 66 52 43 51 41 30 Rank% 1 Manager Tenure Yes AUM Yes Ω Alpha 5Yr Yes FARCX AvgPeer

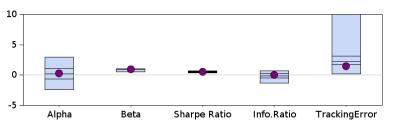




Lansing Board of Water & Light 457(b) Deferred Compensation Plan Nuveen Real Estate Securities I

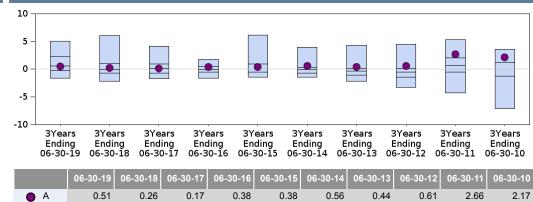
Portfolio Analysis	Fund	Peer Group	Returns	for 12 Q	uarter F	Rolling P	eriods							
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	13,819.24 30.79 93.00	12,753.48 30.20 82.00	50											
Sector Weightings (%)	Fund	Peer Group	0											
Technology	0.00	0.71												
Communication Services	0.00	2.49												
Consumer Cyclical	0.00	1.60	-50 <u> </u>	ears :	3Years	3Years	3Ye	ars 3)	ears :	3Years	3Years	3Years	3Years	3Years
Consumer Defensive	0.00	0.01			Ending	Ending				Ending	Ending	Ending	Ending	Ending
Industrials	0.00	0.29	06-3	30-Ĭ9 O	6-30-18	06-30-1					06-30-13	06-30-12	06-30-Ĭ1	06-30-ĬO
Basic Materials	0.00	0.26												
Financial Services	0.00	0.26		06-30	-19 06-:	30-18 06	-30-17	06-30-16	06-30-15	5 06-30-1	4 06-30-1	3 06-30-12	06-30-11	06-30-10
Real Estate	100.00	94.03												
Healthcare	0.00	0.20	Ο Α	4	17	7.72	7.89	13.48	8.67	7 11.6	4 18.1	1 32.64	7.92	-6.43
Energy	0.00	0.03	Rank %		52	37	40	26	31	1 1	7 1	7 33	19	14
Utilities	0.00	0.13	B	3	8.73	7.71	8.04	13.55	8.67	7 11.3	8 18.0	8 33.52	4.71	-10.33
			Rank %		64	38	36	24	31	1 2	6 1	8 18	70	74





Risk Measures 5 Yr	Fund	Peer Group
Alpha	0.28	0.25
Beta	0.95	0.91
Sharpe Ratio	0.53	0.53
Information Ratio	0.01	-0.23
RSquared	99.12	92.81
TrackingError	1.48	3.32

Alpha Relative to DJ US Select REIT TR USD for 12 Quarter Rolling Periods



27

37

22

14

14

21

14

Nuveen Real Estate Securities I

DJ US Select REIT TR USD

48

54

44

Rank %



Lansing Board of Water & Light 457(b) Deferred Compensation Plan American Funds Capital World Gr&Inc R6

Ticker: RWIGX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar World Large Stock Benchmark: MSCI ACWI NR USD Fund Inception Date: 03-26-1993

Last Quarter

3.00

3.61

3.54

908

62

Fund Manager: Mark Denning Manager Tenure: 26.25 Years Website: www.americanfunds.com

5 Year

6.03

6.16

5.96

597

45

3 Year

10.97

11.62

11.05

725

47

10 Year

10.23

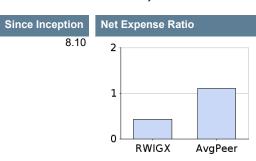
10.15

10.25

355

50

Total Fund Assets: \$97.36 bn Net Expense Ratio: 0.44 Fund Family: American Funds



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

3.00

3.61

62

50

30 20 10 -. 0 -10 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year Last 5 Years Last 10 Years Last 3 Years QTD YTD Last Year

3.46

64

5.74

46

10.97

11.62

47

37

Year to Date

15.62

16.23

16.47

903

54

1 Year

3.46

5.74

4.90

864

64

Returns for Calendar Years



4.16

42

22.80

67

16.13

44

-7.35

57

12.67

50

37

American Funds Capital World Gr&Inc R6

10.15

50

6.03

6.16

45

43

MSCI ACWI NR USD

7.86

32

-2.36

68

15.62

16.23

54

51

FOR CLIENT USE ONLY.

B

Rank %

-9.41

50

23.97

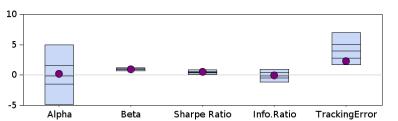
45



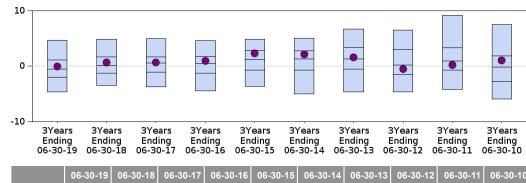
Lansing Board of Water & Light 457(b) Deferred Compensation Plan American Funds Capital World Gr&Inc R6

Portfolio Analysis	Fund	Peer Group	Retur	ns for 12	Quarter F	Rolling P	eriods							
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	75,404.05 15.55 349.00	51,637.24 18.95 193.00	20	•								•		
International Exposure (%)	Fund	Peer Group	Ŭ											
United States Latin America Canada United Kingdom Europe Africa Middle East	48.07 2.52 2.30 10.35 17.10 0.20 0.24	53.12 1.20 2.87 7.79 18.06 0.32 0.22	-20	3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-1	Endi	ing En	ding E	Years nding -30-14	3Years Ending 06-30-13	3Years Ending 06-30-12	3Years Ending 06-30-11	3Years Ending 06-30-10
Japan	3.66	5.89		06	-30-19 06-	30-18 06	-30-17	06-30-16	06-30-15	06-30-14	4 06-30-13	3 06-30-12	06-30-11	06-30-10
Australia	0.37	1.19	•	A	10.97	8.58	5.22	6.70	14.49	11.8	7 13.64	10.04	1.15	-8.90
Asia	15.18	9.34	Rank	x %	47	36	49	42	39	40	0 49	9 65	58	34
Not Classified	0.00	-		В	11.62	8.19	4.82	6.03	13.01	10.2	5 12.36	6 10.80	0.92	-10.51
			Rank	ĸ %	37	44	58	55	60	70	0 70) 53	63	52





Risk Measures 5 Yr	Fund	Peer Group
Alpha	0.22	0.01
Beta	0.93	0.97
Sharpe Ratio	0.50	0.47
Information Ratio	-0.06	-0.07
RSquared	96.49	88.88
TrackingError	2.25	4.13



7		06-30-19	06-30-18	06-30-17	06-30-16	06-30-15	06-30-14	06-30-13	06-30-12	06-30-11	06-30-10
7	Ο Α	-0.02	0.67	0.70	0.99	2.29	2.11	1.58	-0.53	0.21	1.01
7 8	Rank %	42	40	47	41	33	34	46	64	59	36

American Funds Capital World Gr&Inc R6

MSCI ACWI NR USD

Alpha Relative to MSCI ACWI NR USD for 12 Quarter Rolling Periods



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement Income Inv

Ticker: VTINX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date Retirement Benchmark: S&P Target Date Retirement Income TR USD Fund Inception Date: 10-27-2003

Last Quarter

2.97

2.82

2.72

198

27

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

4.18

3.94

3.48

127

19

3 Year

5.24

5.02

5.02

159

42

10 Year

6.36

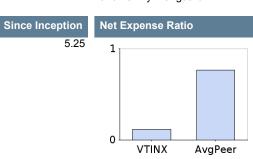
6.03

5.96

93

35

Total Fund Assets: \$16.77 bn Net Expense Ratio: 0.12 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

Year to Date

8.63

8.55

8.63

195

55

1 Year

6.54

5.90

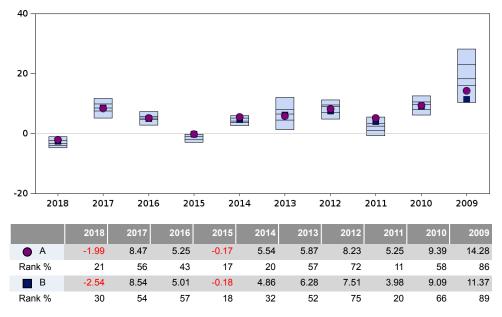
5.89

184

30

	QTD	YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Ο Α	2.97	8.63	6.54	5.24	4.18	6.36
Rank %	27	55	30	42	19	35
B	2.82	8.55	5.90	5.02	3.94	6.03
Rank %	50	59	49	54	30	55

Returns for Calendar Years



Vanguard Target Retirement Income Inv
S&P Target Date Retirement Income Inv

S&P Target Date Retirement Income TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement Income Inv

Portfolio Analysis		Fund	Peer Group	Returns fo	or 12 Quarter	Rolling P	eriods							
eo Avg Market Cap \$MM	4	0,248.28	37,637.08											
rice/Earning Ratio		16.17	16.83	15										
umber of Holdings		6.00	23.00	10 -								_		
				10 -] 🗍			
				5 -				-	-	-				
				o										
				U U										
				-5			r							
				3Yea		3Years	3Years				rs 3Ye		3Years	3Years
				Endi 06-30		Ending 06-30-17	Ending 06-30-1			g Endir 14 06-30-	ng End -13 06-3		Ending 5-30-11 (Ending 06-30-10
				00.00	10 00 00 10		00 00 1				10 00 0			00 00 10
					06-30-19 06	6-30-18 06	-30-17 06	-30-16 06-:	30-15 06-	30-14 06	-30-13 0	6-30-12	06-30-11	06-30-10
				• A	5.24	4.15	3.47	4.93	5.35	6.60	7.43	9.60	5.56	2.53
				Rank %	42	26	24	24	49	40	36	49	32	20
				B	5.02	4.08	3.20	4.55	5.26	6.06	7.10	8.87	4.33	-0.05
				Rank %	53	32	35	37	50	52	43	65	73	57
				INALIK 70	55	52	55	57	50	52	-5	00	75	57
Statistics Relative to S&P								nent Incon						
/ears				5										_
												_ [
4				5						_		_ [•	•
4 2 -						•	•	•	•	•		_ [•	•
4 2 -				5				•				_ [•	•
4 2 -				5						•		_ [•	
4 2- 0			•	5					•			_ [•	•
4 2 -		Info.Ratio	TrackingError	5		•							•	
4 2 0 2		Info.Ratio		5 0 -5 3Yeai Endin	rs 3Years g Ending	3Years Ending	3Years Ending	3Years Ending	3Years Ending	3Year Endin	rs 3Ye g End	aars 3 ling E	Years	3Years Ending
4 2 - 0 -2 Alpha Beta			TrackingError	5 0 -5 3Yea	rs 3Years g Ending	3Years Ending	3Years	3Years Ending	3Years Ending	3Year Endin	rs 3Ye g End	aars 3 ling E	Years	3Years Ending
Vears 4 2 0 2 Alpha Beta Risk Measures 5 Yr		Fund	TrackingError Peer Group	5 0 -5 3Yeai Endin	rs 3Years Ig Ending 19 06-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-1	3Year Endin 4 06-30-	rs 3Ye g End 13 06-30	Pars 3' Bing El 0-12 06	Years nding -30-11 0	3Years Ending 06-30-10
Vears		Fund 0.37	TrackingError Peer Group -0.52	5 0 -5 3Yeai Endin 06-30-	rs 3Years g Ending 19 06-30-18 06-30-19 06	3Years Ending 06-30-17 5-30-18 06	3Years Ending 06-30-16 -30-17 06	3Years Ending 06-30-15 -30-16 06-1	3Years Ending 06-30-1 30-15 06-	3Year Endin 4 06-30- -30-14 06	rs 3Ye g End 13 06-30 -30-13 0	aars 3' ling E 0-12 06 6-30-12	Years nding -30-11 0	3Years Ending 06-30-10
Vears		Fund 0.37 0.95	TrackingError Peer Group -0.52 1.03	5 0 -5 3Year Endin 06-30-	rs 3Years g Ending 19 06-30-18 06-30-19 06 0.46	3Years Ending 06-30-17 6-30-18 06 0.09	3Years Ending 06-30-16 -30-17 06 0.23	3Years Ending 06-30-15 -30-16 06- 0.45	3Years Ending 06-30-1 30-15 06- 0.14	3Year Endin 4 06-30- 30-14 06- 0.73	rs 3Ye g End 13 06-30 -30-13 0 0.75	aars 3' ling E 0-12 06 6-30-12 1.46	Years nding 30-11 0 06-30-11 1.44	3Years Ending 06-30-10 06-30-10 2.37
Vears		Fund 0.37	TrackingError Peer Group -0.52	5 0 -5 3Yeai Endin 06-30-	rs 3Years g Ending 19 06-30-18 06-30-19 06	3Years Ending 06-30-17 5-30-18 06	3Years Ending 06-30-16 -30-17 06	3Years Ending 06-30-15 -30-16 06-1	3Years Ending 06-30-1 30-15 06-	3Year Endin 4 06-30- -30-14 06	rs 3Ye g End 13 06-30 -30-13 0	aars 3' ling E 0-12 06 6-30-12	Years nding -30-11 0	3Years Ending 06-30-10 06-30-11 2.3
Vears		Fund 0.37 0.95 0.86	TrackingError Peer Group -0.52 1.03 0.63	5 0 -5 3Year Endin 06-30-	rs 3Years g Ending 19 06-30-18 06-30-19 06 0.46	3Years Ending 06-30-17 6-30-18 06 0.09	3Years Ending 06-30-16 -30-17 06 0.23	3Years Ending 06-30-15 -30-16 06- 0.45	3Years Ending 06-30-1 30-15 06- 0.14	3Year Endin 4 06-30- 30-14 06- 0.73	rs 3Ye g End 13 06-30 -30-13 0 0.75	aars 3' ling E 0-12 06 6-30-12 1.46	Years nding 30-11 0 06-30-11 1.44	3Years Ending 06-30-10 06-30-11 2.3
4 2 0 2 Alpha Beta Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio		Fund 0.37 0.95 0.86 0.43	TrackingError Peer Group -0.52 1.03 0.63 -0.30	5 0 -5 3Year Endin 06-30-	rs 3Years g Ending 19 06-30-18 06-30-19 06 0.46	3Years Ending 06-30-17 6-30-18 06 0.09	3Years Ending 06-30-16 -30-17 06 0.23	3Years Ending 06-30-15 -30-16 06- 0.45	3Years Ending 06-30-1 30-15 06- 0.14	3Year Endin 4 06-30- 30-14 06- 0.73	rs 3Ye g End 13 06-30 -30-13 0 0.75	aars 3' ling E 0-12 06 6-30-12 1.46	Years nding 30-11 0 06-30-11 1.44	3Years Ending 06-30-10
4 2 0 2 Alpha Beta Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio RSquared	Sharpe Ratio	Fund 0.37 0.95 0.86 0.43 98.19 0.55	TrackingError Peer Group -0.52 1.03 0.63 -0.30 91.39	5 0 -5 3Yeai Endin 06-30-	rs 3Years g Ending 19 06-30-18 06-30-19 06 0.46	3Years Ending 06-30-17 5-30-18 06 0.09 9	3Years Ending 06-30-16 -30-17 06 0.23 4	3Years Ending 06-30-15 -30-16 06- 0.45 5	3Years Ending 06-30-1 30-15 06- 0.14 35	3Year Endin 4 06-30- -30-14 06- 0.73 9	rs 3Ye g End 13 06-30 -30-13 0 0.75	aars 3' ling E 0-12 06 6-30-12 1.46	Years nding 30-11 0 06-30-11 1.44	3Years Ending 06-30-10 06-30-10 2.37



Lansing Board of Water & Light 457(b) Deferred Compensation Plan VT Retirement IncomeAdvantage

Ticker:

Fund

Peers

#Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date Retirement Benchmark: S&P Target Date Retirement Income TR USD Fund Inception Date: -

Last Quarter

3.01

2.82

2.72

198

21

Fund Manager: NA Manager Tenure: -Website: -

5 Year

4.48

3.94

3.48

127

11

10 Year

6.94

6.03

5.96

93

16

3 Year

6.94

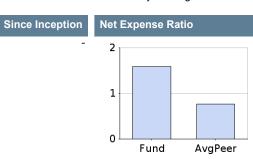
5.02

5.02

159

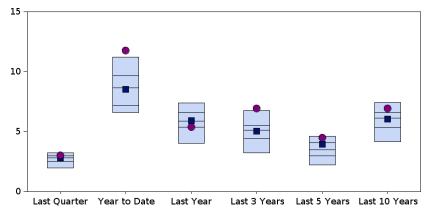
2

Total Fund Assets: -Net Expense Ratio: 1.59 Fund Family: VantageTrust



Criteria	Pass Criteria				
Return 1Yr	Yes				
Return 5Yr	Yes				
Expense Ratio	No				
Prod Hist	NE				
Manager Tenure	NE				
AUM	NE				
Alpha 5Yr	NE				

Returns for Periods Ending 06/30/2019



Year to Date

11.77

8.55

8.63

195

1

1 Year

5.40

5.90

5.89

184

74

Returns for Calendar Years

Insufficient data to display graph

	QTD	YTD	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
• A	3.01	11.77	5.40	6.94	4.48	6.94
Rank %	21	1	74	2	11	16
B	2.82	8.55	5.90	5.02	3.94	6.03
Rank %	50	59	49	54	30	55

VT Retirement IncomeAdvantage

S&P Target Date Retirement Income TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan VT Retirement IncomeAdvantage

Portfolio Analysis	Fund	Peer Group	Returns for 12 Quarter Rolling Periods
Geo Avg Market Cap \$MM Price/Earning Ratio	-	37,637.08 16.83	Insufficient data to display graph
Number of Holdings	-	23.00	
Statistics Relative to S&P Target Date	Retirement Income TR U	SD for 5 Years	Alpha Relative to S&P Target Date Retirement Income TR USD for 12 Quarter Rolling Periods
Insufficient data to display graph			Insufficient data to display graph
	_		
Risk Measures 5 Yr	Fund	Peer Group	
Alpha	-	-0.52	
Beta	-	1.03	
Sharpe Ratio	-	0.63	
Information Ratio	-	-0.30	
RSquared	-	91.39	
		4 40	
TrackingError	-	1.40	



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2015 Inv

Ticker: VTXVX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2015 Benchmark: S&P Target Date 2015 TR USD Fund Inception Date: 10-27-2003

Last Quarter

3.05

2.79

2.95

148

39

Year to Date

9.74

9.87

145

63

10.03

1 Year

6.48

5.77

5.99

135

36

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

3 Year

6.66

6.54

6.45

109

43

5 Year

4.89

4.77

4.32

79

29

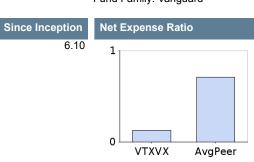
10 Year

8.33

7.89

7.72

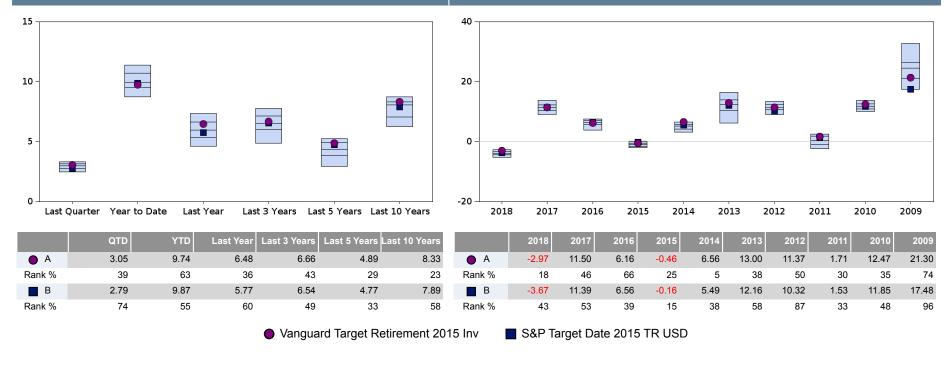
54 23 Total Fund Assets: \$15.77 bn Net Expense Ratio: 0.13 Fund Family: Vanguard



Criteria	Pass Criteria				
Return 1Yr	Yes				
Return 5Yr	Yes				
Expense Ratio	Yes				
Prod Hist	Yes				
Manager Tenure	Yes				
AUM	Yes				
Alpha 5Yr	Yes				

Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2015 Inv

Portfolio Analysis		Fund	Peer Group	Returns	for 12	Quarter I	Rolling Pe	eriods						
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	4	0,333.82 16.18 6.00	42,246.32 17.11 25.00	20										
				10 -										
				0										
					Years	3Years	3Years	3Years	3Years			3Years	3Years	3Years
					nding -30-19	Ending 06-30-18	Ending 06-30-17	Ending 06-30-16	Ending 6 06-30-1	Ending 5 06-30-14	Ending 4 06-30-13	Ending 06-30-12	Ending 06-30-11	Ending 06-30-10
					06-3	30-19 06-	30-18 06-	-30-17 06-	30-16 06-3	80-15 06-3	0-14 06-30	-13 06-30-1	2 06-30-11	06-30-10
				Ο Α		6.66	5.14	4.20	6.22			.55 11.7		-2.80
				Rank %		43	39	26	10	27	25	40 3		
				B Rank %		6.54 49	5.33 23	4.17 29	5.73 32	8.17 51	8.04 9 48	.89 10.9 58 6		-2.84 17
						-	-	-	-					
Statistics Relative to S&P T	arget Date 2015 TR	USD for 5 Yea	ars	Alpha R	elative	to S&P T	arget Dat	e 2015 TR	USD for	12 Quarter	r Rolling P	eriods		
			-	2 0 -2 -										
Alpha Beta Risk Measures 5 Yr	Sharpe Ratio	Info.Ratio	TrackingError Peer Group	-4 3Ye Enc 06-3	ling	3Years Ending 6-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14	3Years Ending 06-30-13	3Years Ending 06-30-12	3Years Ending 06-30-11	3Years Ending 06-30-10
Alpha		0.37	-0.35	00-5								_		
Beta		0.93	0.98		06-3	30-19 06-	30-18 06-	30-17 06-	30-16 06-3	06-3	0-14 06-30	-13 06-30-1	2 06-30-11	06-30-10
Sharpe Ratio		0.77	0.63	Ο Α		0.65	-0.06	0.07	0.51	0.51	0.78 0	.58 0.6	6 0.04	0.49
Information Ratio RSguared		0.17 98.45	-0.31 95.75	Rank %		28	16	17	14	8	15	16 3	3 15	16
TrackingError		0.76	1.20											
		Vangua	rd Target Retiren	nent 2015	i Inv	S 8	P Target	Date 201	5 TR US	D				



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2020 Inv

Ticker: VTWNX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2020 Benchmark: S&P Target Date 2020 TR USD Fund Inception Date: 06-07-2006

Last Quarter

3.24

2.88

3.02

259

28

Year to Date

11.32

10.54

10.67

256

33

1 Year

6.53

5.78

5.96

245

30

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

3 Year

7.82

7.28

6.89

204

22

5 Year

5.55

5.15

4.52

163

8

10 Year

9.15

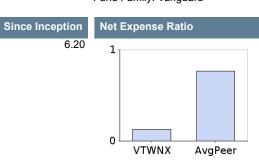
8.66

8.08

101

13

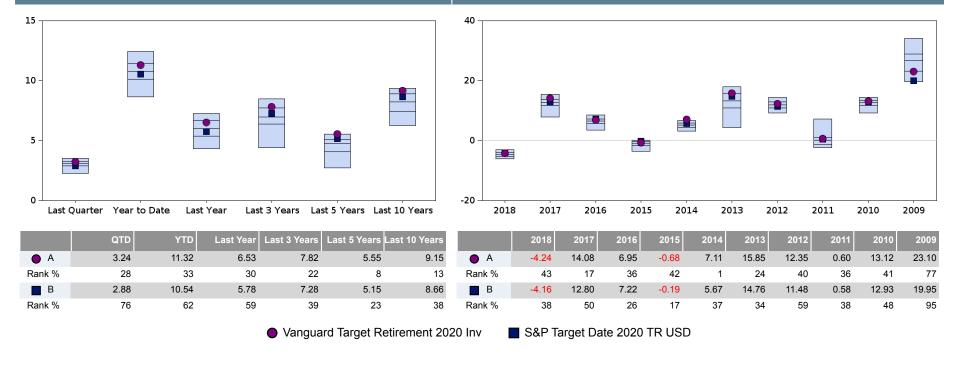
Total Fund Assets: \$32.91 bn Net Expense Ratio: 0.13 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2020 Inv

Portfolio Analysis	Fund	Peer Group	Returns for 1	2 Quarter I	Rolling Pe	riods						
Geo Avg Market Cap \$MM Price/Earning Ratio	40,250.30 16.17	41,217.94 16.97	20									
Number of Holdings	6.00	25.00	10 -			_						
			0									
			-10	21								
			3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-1	3Years Ending 5 06-30-14	Endin	g Ending	Ending	3Years Ending 06-30-10
					-30-18 06-3					30-13 06-30		
			● A	7.82	6.08	4.85					.17 4.71	
			Rank %	23 7.28	13 5.91	7 4.58	6	15 9.39	12 8.88	25 11.05 11	32 27 .75 4.72	
			Rank %	39	21	4.56	6.19 20	9.39 35	38	39	.75 4.72 56 27	
Statistics Relative to S&P Target Date	2020 TR USD for 5 Yea	rs	Alpha Relativ	re to S&P 1	arget Date	e 2020 TR	USD for	12 Quarte	r Rolling	Periods		
	2020 TR USD for 5 Yea	rs	Alpha Relativ	e to S&P 1	Farget Date	2020 TR	USD for	12 Quarte	r Rolling	Periods	•	•
	2020 TR USD for 5 Yea	TrackingError	5	e to S&P 1	Farget Date	e 2020 TR		12 Quarte	r Rolling	Periods	•	•
		•	5 0 -5 3Years Ending	3Years Ending	3Years Ending	e 2020 TR		3Years Ending	3Years Ending	3Years Ending	3Years Ending 06-30-11	3Years Ending 06-30-10
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha	pe Ratio Info.Ratio	TrackingError Peer Group -0.34	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14	3Years Ending 06-30-1	3Years Ending 3 06-30-12	Ending 06-30-11	Ending 06-30-10
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta	pe Ratio Info.Ratio Fund 0.27 1.03	TrackingError Peer Group -0.34 0.94	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18 6-30-19 06-	3Years Ending 06-30-17 -30-18 06-3	3Years Ending 06-30-16 30-17 06-3	3Years Ending 06-30-15 30-16 06-3	3Years Ending 06-30-14	3Years Ending 06-30-1 0-14 06-3	3 3Years Ending 3 06-30-12	Ending 06-30-11 -12 06-30-11	Ending 06-30-10 06-30-10
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio	pe Ratio Info.Ratio Fund 0.27 1.03 0.72	TrackingError Peer Group -0.34 0.94 0.61	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18 6-30-19 06- 0.33	3Years Ending 06-30-17 -30-18 06-3 0.01	3Years Ending 06-30-16 30-17 06-3 0.16	3Years Ending 06-30-15 30-16 06-3 0.44	3Years Ending 06-30-14 00-15 06-3 0.64	3Years Ending 06-30-1 0-14 06-3 0.91	3 3Years Ending 3 06-30-12 30-13 06-30 0.58 0	Ending 06-30-11 -12 06-30-11 .54 -0.14	Ending 06-30-10 06-30-10 0.41
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta	pe Ratio Info.Ratio Fund 0.27 1.03	TrackingError Peer Group -0.34 0.94	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18 6-30-19 06-	3Years Ending 06-30-17 -30-18 06-3	3Years Ending 06-30-16 30-17 06-3	3Years Ending 06-30-15 30-16 06-3	3Years Ending 06-30-14	3Years Ending 06-30-1 0-14 06-3	3 3Years Ending 3 06-30-12	Ending 06-30-11 -12 06-30-11	Ending 06-30-10 06-30-10 0.41
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio	pe Ratio Info.Ratio Fund 0.27 1.03 0.72 0.67	TrackingError Peer Group -0.34 0.94 0.61 -0.35	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18 6-30-19 06- 0.33	3Years Ending 06-30-17 -30-18 06-3 0.01	3Years Ending 06-30-16 30-17 06-3 0.16	3Years Ending 06-30-15 30-16 06-3 0.44	3Years Ending 06-30-14 00-15 06-3 0.64	3Years Ending 06-30-1 0-14 06-3 0.91	3 3Years Ending 3 06-30-12 30-13 06-30 0.58 0	Ending 06-30-11 -12 06-30-11 .54 -0.14	Ending 06-30-10 06-30-10 0.41



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2025 Inv

Ticker: VTTVX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2025 Benchmark: S&P Target Date 2025 TR USD Fund Inception Date: 10-27-2003

Last Quarter

3.35

2.99

3.16

242

31

Year to Date

12.46

11.61

11.87

239

26

1 Year

6.61

5.70

5.99

228

28

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

5.94

5.52

5.00

149

6

3 Year

8.69

8.09

7.93

186

26

10 Year

9.79

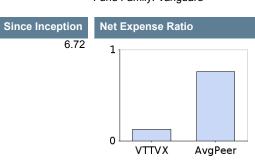
9.33

8.96

80

16

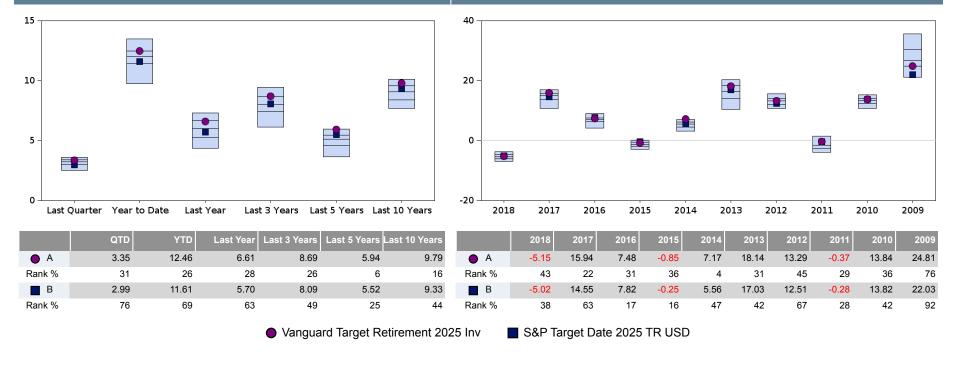
Total Fund Assets: \$43.56 bn Net Expense Ratio: 0.13 Fund Family: Vanguard



Criteria	Pass Criteria				
Return 1Yr	Yes				
Return 5Yr	Yes				
Expense Ratio	Yes				
Prod Hist	Yes				
Manager Tenure	Yes				
AUM	Yes				
Alpha 5Yr	Yes				

Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2025 Inv

Portfolio Analysis	Fund	Peer Group	Returns fo	or 12 Quarte	r Rolling P	eriods						
Geo Avg Market Cap \$MM Price/Earning Ratio Number of Holdings	40,249.45 16.17 5.00	41,536.28 17.03 26.00	20									
			0									
			-10									
			3Yea Endi		I Ending	Ending	3Years Ending 6 06-30-15	3Years Ending 5 06-30-14	3Years Ending 06-30-13	3Years Ending 06-30-12	3Years Ending 06-30-11	3Years Ending 06-30-10
				06-30-19 0	6-30-18 06	-30-17 06-3	30-16 06-3	0-15 06-30	0-14 06-30-1	13 06-30-12	06-30-11	06-30-10
			• A	8.69	6.68	5.18	7.04	11.18 10	0.42 12.3	34 12.67	4.35	-5.48
			Rank %	26	17	9	6	26	15 3	33 34	30	33
			B	8.09	6.59	4.85	6.48 1	0.36 9	9.60 12.0)3 12.35	4.60	-5.30
			Rank %	49	21	26	21	47	37 3	38 40	20	31
Statistics Relative to S&P Target Date	2025 TR USD for 5 Yea	ırs		ative to S&P	Target Dat	te 2025 TR	USD for	12 Quarter	· Rolling Pe	riods		
			2 0 -2 -									•
	pe Ratio Info Ratio	TrackingError	-4									
Risk Measures 5 Yr	Fund	Peer Group	3Year Ending 06-30-2	g Ending	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14	3Years Ending 06-30-13	3Years Ending 06-30-12 (3Years Ending)6-30-11	3Years Ending 06-30-10
Alpha	0.30	-0.40		06-30-19 0	6-30-18 06	20 17 06 4	30-16 06-3	0-15 06-30		13 06-30-12	06 20 11	06-30-10
Beta Sharpe Ratio	1.02 0.69	0.98 0.59										
Information Ratio	0.63	-0.33	A Rank %	0.40	-0.07 14	0.20 7	0.40		0.89 0.4 12 2	48 0.47 23 36		0.24
RSquared	99.28	97.25	rtank %	35	14	1	14	13	12 2	23 36	28	45
TrackingError	0.66	1.31										
	Vanguar	rd Target Retirem	nent 2025 Ir	יע 🗖 S	&P Target	Date 202	25 TR US	D				



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2030 Inv

Ticker: VTHRX

Fund

Peers #Funds

Rank%

• A

Rank %

В

Rank %

Benchmark

Peer Group/Category: Morningstar Target-Date 2030 Benchmark: S&P Target Date 2030 TR USD Fund Inception Date: 06-07-2006

Last Quarter

3.41

3.09

3.24

248

32

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

3 Year

9.39

8.82

8.75

194

34

5 Year

6.22

5.89

5.44

153

18

10 Year

10.35

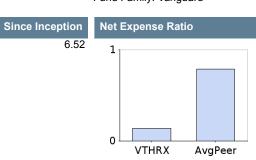
9.91

9.42

91

18

Total Fund Assets: \$38.40 bn Net Expense Ratio: 0.14 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

3.41

3.09

32

75

15 10 -**__** 5 0 Last Quarter Year to Date Last 3 Years Last 5 Years Last 10 Years Last Year Last 5 Years Last 10 Years Last 3 Years QTD YTD Last Year

6.42

32

5.55

60

9.39

8.82

51

34

Year to Date

13.27

12.78

12.98

245

39

1 Year

6.42

5.55

5.86

234

32

Detumo fen Celenden



Vanguard Target Retirement 2030 Inv

6.22

5.89

18

33

37

S&P Target Date 2030 TR USD

19

19

50

44

60

34

35

97

70

42

13.27

12.78

39

67

Rank %



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2030 Inv

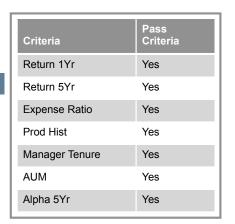
Portfolio Analysis	Fund	Peer Group	Returns for 12	2 Quarter	Rolling Pe	eriods						
Geo Avg Market Cap \$MM	40,246.40	40,468.81										
Price/Earning Ratio	16.16	16.98	20									
Number of Holdings	5.00	24.00										
			10 -									
											-	
			o									
			-									
			-10 ⊥ 3Years	3Years	3Years	3Years	3Years	3Years	3Years	3Years	3Years	3Years
			Ending	Ending 06-30-18	Ending 06-30-17	Ending	Ending 06-30-1	Ending	Ending	Ending 3 06-30-12	Ending	Ending
			06-30-19	06-30-10	06-30-17	06-30-16	06-30-13	06-30-14	4 06-30-13	5 06-50-12	06-30-11	06-30-10
			06	-30-19 06	-30-18 06-	30-17 06-3	30-16 06-3	0-15 06-3	0-14 06-30	0-13 06-30-12	2 06-30-11	06-30-10
			• A	9.39	7.19	5.42	7.27 1	12.20 1	1.09 13	3.23 13.0	9 4.01	-6.82
			Rank %	34	26	17	10	21	20	28 34		
			B	8.82	7.23	5.16				2.82 12.74		
			Rank %	51	23	34	23	42	37	37 5		
Statistics Relative to S&P Target Date	2030 TR USD for 5 Yea	Irs	Alpha Relativ	e to S&P]	Target Dat	e 2030 TR	USD for	12 Quarte	r Rolling P	Periods		
	2030 TR USD for 5 Yea	Irs	Alpha Relativ	e to S&P 1	Target Dat	e 2030 TR	USD for	12 Quarte	r Rolling P	Periods		
Statistics Relative to S&P Target Date	2030 TR USD for 5 Yea	irs		e to S&P ⊺	Target Dat	e 2030 TR	USD for	12 Quartei	r Rolling P	Periods		
4	2030 TR USD for 5 Yea	ırs		e to S&P ⊺	Target Dat	e 2030 TR	USD for	12 Quarter	r Rolling P	Periods		
4	2030 TR USD for 5 Yea		5	e to S&P ⊺	Target Dat	e 2030 TR	USD for	12 Quarter	r Rolling P	Periods	_	
4	2030 TR USD for 5 Yea			e to S&P T	Farget Dat	e 2030 TR	USD for	12 Quarter	r Rolling P	Periods	•	
4	_	irs	5	e to S&P 1	Farget Dat	e 2030 TR	USD for	12 Quarter	r Rolling P	Periods		
	_	irs	5	e to S&P	Target Dat	e 2030 TR	USD for	12 Quarter	r Rolling P	Periods		
	_	TrackingError	5 0	e to S&P	Target Dat	e 2030 TR	USD for	12 Quarter	r Rolling P	Periods		
			5 0 -5 3Years	3Years	3Years	O 3Years	3Years	3Years	3Years	3 Years	3Years	3Years
			5 0 -5 3Years Ending					3Years Ending		3Years Ending	Ending	
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr	rpe Ratio Info.Ratio	TrackingError	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17	SYears Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14	3Years Ending 06-30-13	3Years Ending 06-30-12	Ending 06-30-11	3Years Ending 06-30-10
4 2 0 -2 Alpha Beta Shar	rpe Ratio Info.Ratio Fund 0.27 1.01	TrackingError Peer Group	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17	SYears Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14	3Years Ending	3Years Ending 06-30-12	Ending 06-30-11	3Years Ending 06-30-10
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio	rpe Ratio Info.Ratio Fund 0.27 1.01 0.66	TrackingError Peer Group -0.35 0.99 0.58	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17	SYears Ending 06-30-16	3Years Ending 06-30-15 30-16 06-3	3Years Ending 06-30-14	3Years Ending 06-30-13 0-14 06-30	3Years Ending 06-30-12	Ending 06-30-11 2 06-30-11	3Years Ending 06-30-10 06-30-10
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio	rpe Ratio Info.Ratio Fund 0.27 1.01 0.66 0.45	TrackingError Peer Group -0.35 0.99 0.58 -0.24	5 0 -5 3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17 -30-18 06-	3Years Ending 06-30-16 30-17 06-3	3Years Ending 06-30-15 30-16 06-3	3Years Ending 06-30-14	3Years Ending 06-30-13 0-14 06-30	3Years Ending 06-30-12 0-13 06-30-13	Ending 06-30-11 2 06-30-11 7 -0.39	3Years Ending 06-30-10 06-30-10 0.12
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio RSquared	rpe Ratio Info.Ratio Fund 0.27 1.01 0.66 0.45 99.24	TrackingError Peer Group -0.35 0.99 0.58 -0.24 96.48	5 0 -5 3Years Ending 06-30-19 06 A	3Years Ending 06-30-18 -30-19 06 0.59	3Years Ending 06-30-17 -30-18 06- -0.24	3Years Ending 06-30-16 30-17 06-3 0.09	3Years Ending 06-30-15 30-16 06-3 0.26	3Years Ending 06-30-14 00-15 06-31 0.60	3Years Ending 06-30-13 0-14 06-30 0.85 0	3Years Ending 06-30-12 0-13 06-30-12 0.48 0.3	Ending 06-30-11 2 06-30-11 7 -0.39	3Years Ending 06-30-10 06-30-10 0.12
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio	rpe Ratio Info.Ratio Fund 0.27 1.01 0.66 0.45	TrackingError Peer Group -0.35 0.99 0.58 -0.24	5 0 -5 3Years Ending 06-30-19 06 A	3Years Ending 06-30-18 -30-19 06 0.59	3Years Ending 06-30-17 -30-18 06- -0.24	3Years Ending 06-30-16 30-17 06-3 0.09	3Years Ending 06-30-15 30-16 06-3 0.26	3Years Ending 06-30-14 00-15 06-31 0.60	3Years Ending 06-30-13 0-14 06-30 0.85 0	3Years Ending 06-30-12 0-13 06-30-12 0.48 0.3	Ending 06-30-11 2 06-30-11 7 -0.39	3Years Ending 06-30-10 06-30-10 0.12
4 2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio RSquared	rpe Ratio Info.Ratio Fund 0.27 1.01 0.66 0.45 99.24 0.74	TrackingError Peer Group -0.35 0.99 0.58 -0.24 96.48	5 0 -5 3Years Ending 06-30-19 06 A Rank %	3Years Ending 06-30-18 -30-19 06 0.59 32	3Years Ending 06-30-17 -30-18 06- -0.24	3Years Ending 06-30-16 30-17 06-3 0.09 13	3Years Ending 06-30-15 30-16 06-3 0.26 14	3Years Ending 06-30-14 30-15 06-3 0.60 18	3Years Ending 06-30-13 0-14 06-30 0.85 0	3Years Ending 06-30-12 0-13 06-30-12 0.48 0.3	Ending 06-30-11 2 06-30-11 7 -0.39	3Years Ending 06-30-10 06-30-10 0.12

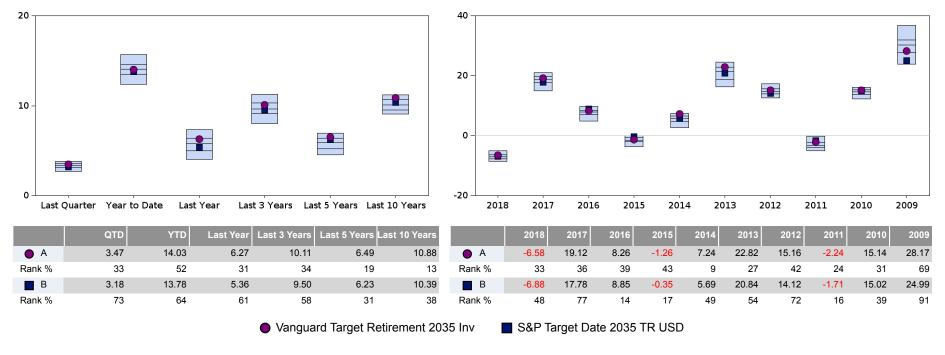


Ticker: VTTHX

Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2035 Inv

Peer Group/Category: Morningstar Target-Date 2035 Fund Manager: William Coleman Total Fund Assets: \$36.49 bn Benchmark: S&P Target Date 2035 TR USD Manager Tenure: 6.33 Years Net Expense Ratio: 0.14 Fund Inception Date: 10-27-2003 Website: www.vanguard.com Fund Family: Vanguard Last Quarter Year to Date 3 Year 5 Year 10 Year Since Inception Net Expense Ratio 1 Year 3.47 6.27 10.11 6.49 10.88 7.31 Fund 14.03 1 3.18 13.78 5.36 9.50 6.23 10.39 Benchmark 3.31 14.02 5.71 9.66 5.80 10.07 Peers #Funds 237 234 223 181 144 75 33 52 31 19 13 Rank% 34 VTTHX AvgPeer Returns for Periods Ending 06/30/2019 **Returns for Calendar Years**







Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2035 Inv

Portfolio Analysis	Fund	Peer Group	Returns for 1	2 Quarter	Rolling Pe	eriods						
	40,246.14	40,308.17			Ttoning P t							
Geo Avg Market Cap \$MM Price/Earning Ratio	40,246.14	40,308.17 17.03	20									
Number of Holdings	5.00	24.00										
	0.00	24.00										
			10 –									
											_	
			0									
			Ū									
			-10									
			3Years Ending	3Years Ending	3Years Ending	3Years Ending	3Years Ending		3Years Ending	3Years Ending	3Years Ending	3Years Ending
					3 06-30-17		6 06-30-1			06-30-12		06-30-10
			06	6-30-19 06	-30-18 06-	30-17 06-3	30-16 06-:	30-15 06-3	0-14 06-30	-13 06-30-12	06-30-11	06-30-10
			• A	10.11	7.66	5.66	7.50	13.21 1	1.75 14	.05 13.43	3.96	-7.66
			Rank %	35	30	23	9	24	18	25 22	27	31
			B	9.50	7.83	5.47	7.07	12.08 1	0.77 13	.44 13.05	4.05	-7.36
			Rank %	57	22	33	21	53	39	37 36	22	25
				•••								
Statistics Relative to S&P Target Date	2035 TR USD for 5 Year	rs	Alpha Relativ	e to S&P ⁻	Target Dat	e 2035 TR	USD for	12 Quarte	r Rolling P	eriods		
	2035 TR USD for 5 Year	rs		e to S&P ⁻	Target Dat	e 2035 TR	USD for	12 Quarter	r Rolling P	eriods		
Statistics Relative to S&P Target Date	2035 TR USD for 5 Year	rs	Alpha Relativ	e to S&P ⁻	Target Dat	e 2035 TR	USD for	12 Quarter	r Rolling P	eriods		
2	2035 TR USD for 5 Year			e to S&P ⁻	Target Dat	e 2035 TR	USD for	12 Quarter		eriods		
2	2035 TR USD for 5 Year	rs			Target Dat	e 2035 TR	USD for		r Rolling P	eriods		
2			2	e to S&P	Target Dat	e 2035 TR	USD for			eriods	•	•
2			2		Target Dat	e 2035 TR	USD for			eriods	•	
2			2		Target Dat	e 2035 TR	USD for			eriods	•	•
			2		Target Dat	e 2035 TR	USD for			eriods	•	•
							•		•			
2 0 -2 Alpha Beta Shar	Pe Ratio Info.Ratio	TrackingError	2 0 -2 -4 -3 Years	3Years	3Years	3Years	3Years	• 3Years	O 3Years	3 Years	3Years Ending	3Years
			2 0 -2 -4 -3 Ending				3Years Ending	3Years Ending	3Years Ending	3Years Ending	Ending	
2 0 -2 Alpha Beta Shar	Pe Ratio Info.Ratio	TrackingError	2 0 -2 -4 -3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14	3Years Ending 06-30-13	3Years Ending 06-30-12	Ending 06-30-11 (3Years Ending 06-30-10
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr	pe Ratio Info.Ratio	TrackingError Peer Group -0.47 1.01	2 0 -2 -4 -3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending	3Years Ending 06-30-13	3Years Ending 06-30-12	Ending 06-30-11 (3Years Ending 06-30-10
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio	pe Ratio Info.Ratio	TrackingError Peer Group -0.47 1.01 0.56	2 0 -2 -4 -3Years Ending 06-30-19	3Years Ending 06-30-18	3Years Ending 06-30-17	3Years Ending 06-30-16	3Years Ending 06-30-15	3Years Ending 06-30-14 30-15 06-3	3Years Ending 06-30-13	3Years Ending 06-30-12	Ending 06-30-11 (06-30-11	3Years Ending 06-30-10 06-30-10
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio	pe Ratio Info.Ratio Fund 0.20 1.01 0.63 0.29	TrackingError Peer Group -0.47 1.01 0.56 -0.28	2 0 -2 -4 -3 Ending 06-30-19	3Years Ending 06-30-18 5-30-19 06	3Years Ending 06-30-17 -30-18 06-	3Years Ending 06-30-16 30-17 06-1	3Years Ending 06-30-15 30-16 06-1	3Years Ending 06-30-14 30-15 06-3	3Years Ending 06-30-13 0-14 06-30. 0.67 0	3Years Ending 06-30-12	Ending 06-30-11 06-30-11 -0.16	3Years Ending 06-30-10 06-30-10 0.20
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio RSquared	Pe Ratio Info.Ratio Fund 0.20 1.01 0.63 0.29 99.12	TrackingError Peer Group -0.47 1.01 0.56 -0.28 97.93	2 0 -2 -4 -3Years Ending 06-30-19	3Years Ending 06-30-18 5-30-19 06 0.74	3Years Ending 06-30-17 -30-18 06- -0.49	3Years Ending 06-30-16 30-17 06-3 -0.10	3Years Ending 06-30-15 30-16 06-3 0.06	3Years Ending 06-30-14 30-15 06-3 0.56	3Years Ending 06-30-13 0-14 06-30. 0.67 0	3Years Ending 06-30-12 -13 06-30-12 .27 0.04	Ending 06-30-11 06-30-11 06-30-11 -0.16	3Years Ending 06-30-10 06-30-10 0.20
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio	pe Ratio Info.Ratio Fund 0.20 1.01 0.63 0.29	TrackingError Peer Group -0.47 1.01 0.56 -0.28	2 0 -2 -4 -3Years Ending 06-30-19	3Years Ending 06-30-18 5-30-19 06 0.74	3Years Ending 06-30-17 -30-18 06- -0.49	3Years Ending 06-30-16 30-17 06-3 -0.10	3Years Ending 06-30-15 30-16 06-3 0.06	3Years Ending 06-30-14 30-15 06-3 0.56	3Years Ending 06-30-13 0-14 06-30. 0.67 0	3Years Ending 06-30-12 -13 06-30-12 .27 0.04	Ending 06-30-11 06-30-11 06-30-11 -0.16	3Years Ending 06-30-10 06-30-10 0.20
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio RSquared	Ppe Ratio Info.Ratio Fund 0.20 1.01 0.63 0.29 99.12 0.88	TrackingError Peer Group -0.47 1.01 0.56 -0.28 97.93 1.42	2 0 -2 -4 3Years Ending 06-30-19 06 A Rank %	3Years Ending 06-30-18 6-30-19 06 0.74 28	3Years Ending 06-30-17 -0.49 28	3Years Ending 06-30-16 30-17 06- -0.10 19	3Years Ending 06-30-15 30-16 06-1 0.06 11	3Years Ending 06-30-14 30-15 06-3 0.56 22	3Years Ending 06-30-13 0-14 06-30. 0.67 0	3Years Ending 06-30-12 -13 06-30-12 .27 0.04	Ending 06-30-11 06-30-11 06-30-11 -0.16	3Years Ending 06-30-10 06-30-10 0.20
2 0 -2 Alpha Beta Shar Risk Measures 5 Yr Alpha Beta Sharpe Ratio Information Ratio RSquared	Ppe Ratio Info.Ratio Fund 0.20 1.01 0.63 0.29 99.12 0.88	TrackingError Peer Group -0.47 1.01 0.56 -0.28 97.93	2 0 -2 -4 3Years Ending 06-30-19 06 A Rank %	3Years Ending 06-30-18 6-30-19 06 0.74 28	3Years Ending 06-30-17 -30-18 06- -0.49	3Years Ending 06-30-16 30-17 06- -0.10 19	3Years Ending 06-30-15 30-16 06-1 0.06 11	3Years Ending 06-30-14 30-15 06-3 0.56 22	3Years Ending 06-30-13 0-14 06-30. 0.67 0	3Years Ending 06-30-12 -13 06-30-12 .27 0.04	Ending 06-30-11 06-30-11 06-30-11 -0.16	3Years Ending 06-30-10 06-30-10 0.20



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2040 Inv

Ticker: VFORX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2040 Benchmark: S&P Target Date 2040 TR USD Fund Inception Date: 06-07-2006

Last Quarter

3.46

3.27

3.32

247

36

Year to Date

14.79

14.45

14.69

244

48

1 Year

6.00

5.26

5.48

233

33

3 Year

10.79

10.00

10.04

193

27

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

6.72

6.47

6.01

152

22

10 Year

11.17

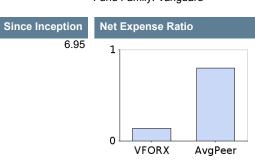
10.73

10.21

91

15

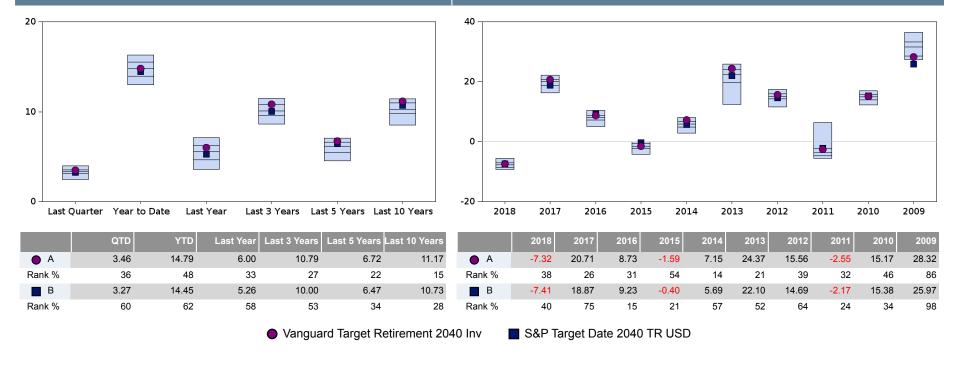
Total Fund Assets: \$28.47 bn Net Expense Ratio: 0.14 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2040 Inv

Portfolio Analysis		Fund	Peer Group	Returns for	12 Quarter	Polling P	ariode —							
				Returns for	Tz Quarter	Rolling Po	enous							
Geo Avg Market Cap \$MM	4	0,239.78	39,321.00	20										
Price/Earning Ratio		16.16	16.99	20				_			_			
Number of Holdings		5.00	23.00	10 -	1					. =				
				o —										
				0										
				-10 -										
				-10 -										
				20										
				-20 3Year	s 3Years	3Years	3Years	3Year	s 3Yea	rs 3Ye	ears 3	Years	3Years	3Years
				Endin	g Ending	Ending	Ending	Ending	g Endir	ig End	ding E	nding	Ending	Ending
				06-30-	Ĭ9 06-30-Ĭ8	8 06-30-17	7 06-30-Ĭ	6 06-30-2	15 06-30	14 06-3	0-13 06	-30-12 0	06-30-11	06-30-10
					06-30-19 06	-30-18 06-	-30-17 06	-30-16 06	-30-15 06	-30-14 0	6-30-13	06-30-12	06-30-11	06-30-10
				• A	10.79	8.14	5.85	7.54	13.82	12.26	14.29	13.40	4.08	-7.57
				Rank %	26	28	28	11	20	18	24	32	29	34
				B	10.00	8.26	5.66	7.25	12.64	11.18	13.88	13.22	3.91	-7.92
				Rank %										
				Rank %	53	21	38	20	48	38	31	41	30	41
Statistics Relative to S&P Targ	not Doto 2040 TR			Alpha Relat	ive to SPD	Torgot Do	- 2040 TI		12 000	or Polli	a Dorio	do		
Statistics Relative to S&P Targ	jel Dale 2040 TR			Alplia Relat	IVE IU SAF	larget Dat	le 2040 Tr			er Konn	ig Perio	us		
4				4										
2 -				2 –							-			
												_		
				0										
0											_ [
				-2 -										
-2 Alpha Beta	Sharpe Ratio	Info.Ratio	TrackingError											
Alpha Deta	Sharpe Natio	nno.Rado	HackingError	-4 3Years	3Years	3Years	3Years	3Years	3Year	s 3Ye	are 3V	ears :	3Years	3Years
				Ending	Ending	Ending	Ending	Ending	Ending	a Endi			Ending	Ending
Risk Measures 5 Yr		Fund	Peer Group		9 06-30-Ĭ8	06-30-Ĭ7	06-30-Ĭ6		5 06-30-1	4 06-30				06-30-ĬO
Alpha		0.06	-0.45											
Beta		1.04	1.01		06-30-19 06	-30-18 06	-30-17 06	-30-16 06	-30-15 06	-30-14 0	6-30-13	06-30-12	06-30-11	06-30-10
Sharpe Ratio		0.61	0.55	A	0.73	-0.66	-0.25	-0.23	0.42	0.86	0.36	0.15	0.15	0.50
Information Ratio		0.24	-0.27	Rank %	22	42	27	21	25	23	30	33	27	38
RSquared		99.08	96.85									50	_/	50
TrackingError		1.03	1.59											
			nd Tong of Dation	a ant 20 40 1	. = ~	&P Target	Data 00	40 70 1 14						
		🚽 vangua	rd Target Retiren	11011 2040 IN	/ 58	ve lardet	Date 204	4U IR US	נור					
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Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2045 Inv

Ticker: VTIVX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2045 Benchmark: S&P Target Date 2045 TR USD Fund Inception Date: 10-27-2003

Last Quarter

3.51

3.32

3.38

237

37

Year to Date

15.39

14.78

15.29

234

47

1 Year

5.90

5.15

5.42

223

33

3 Year

11.05

10.32

10.51

181

28

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

6.86

6.61

6.17

144

19

10 Year

11.24

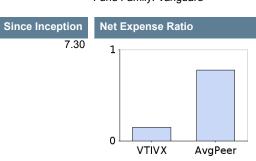
10.94

10.54

74

13

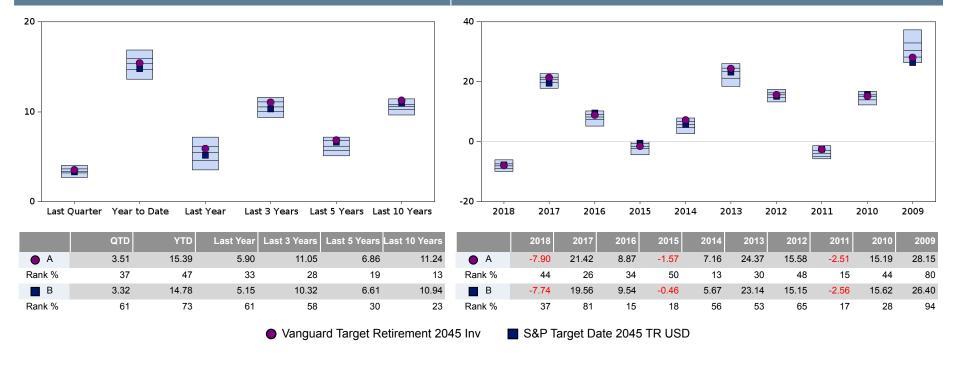
Total Fund Assets: \$26.14 bn Net Expense Ratio: 0.15 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

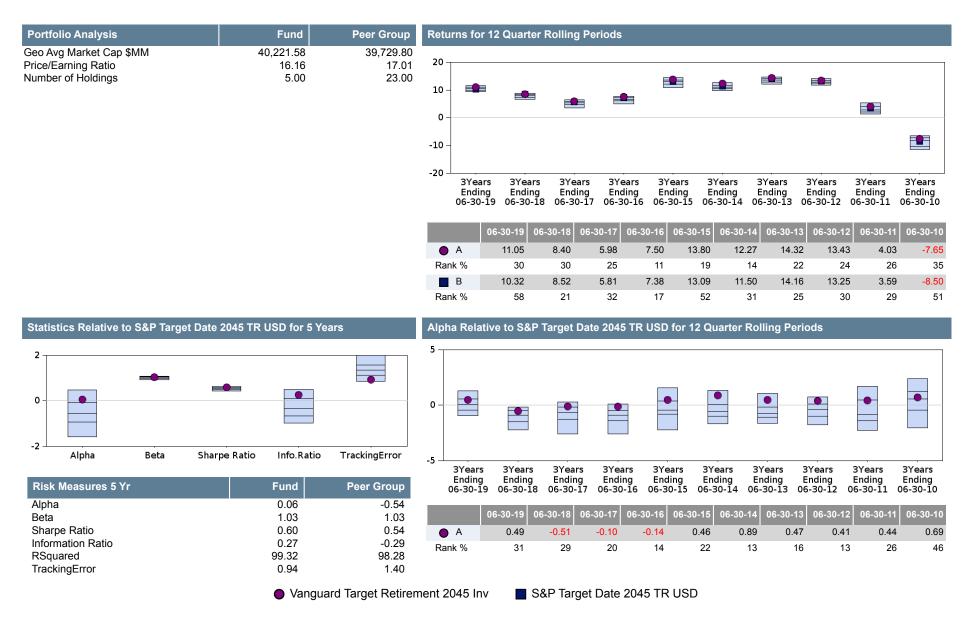
Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2045 Inv





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2050 Inv

Ticker: VFIFX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2050 Benchmark: S&P Target Date 2050 TR USD Fund Inception Date: 06-07-2006

Last Quarter

3.47

3.32

3.37

247

39

Year to Date

15.38

14.97

15.44

244

56

1 Year

5.86

5.03

5.31

233

37

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

6.85

6.73

6.22

152

24

3 Year

11.03

10.61

10.47

193

33

10 Year

11.23

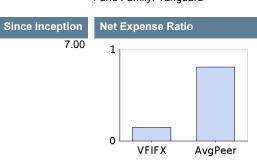
11.10

10.48

73

15

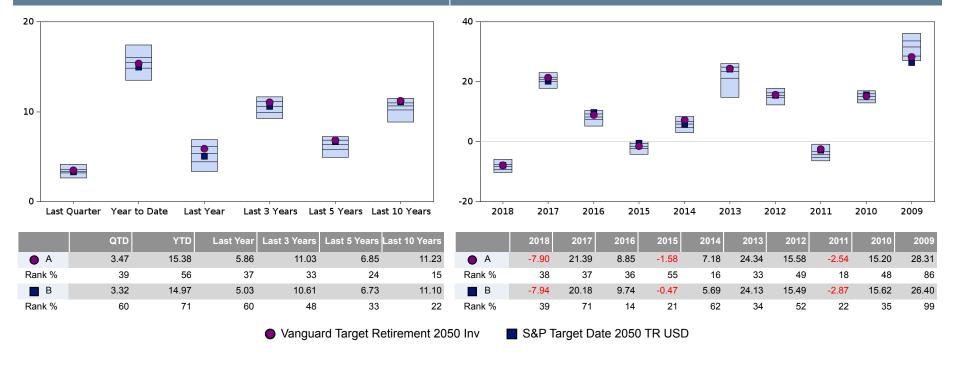
Total Fund Assets: \$18.85 bn Net Expense Ratio: 0.15 Fund Family: Vanguard



Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

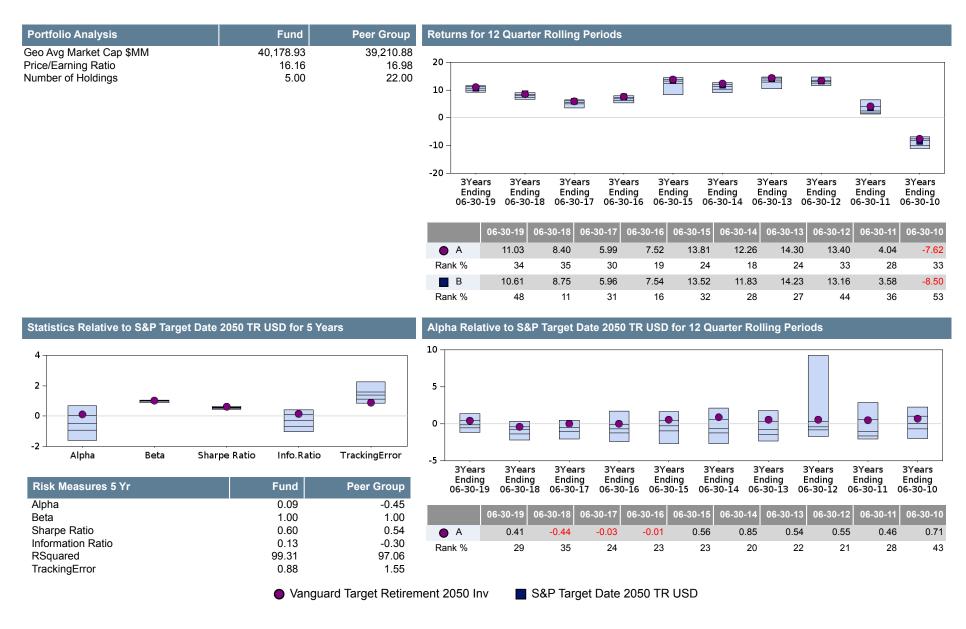
Returns for Periods Ending 06/30/2019

Returns for Calendar Years





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2050 Inv





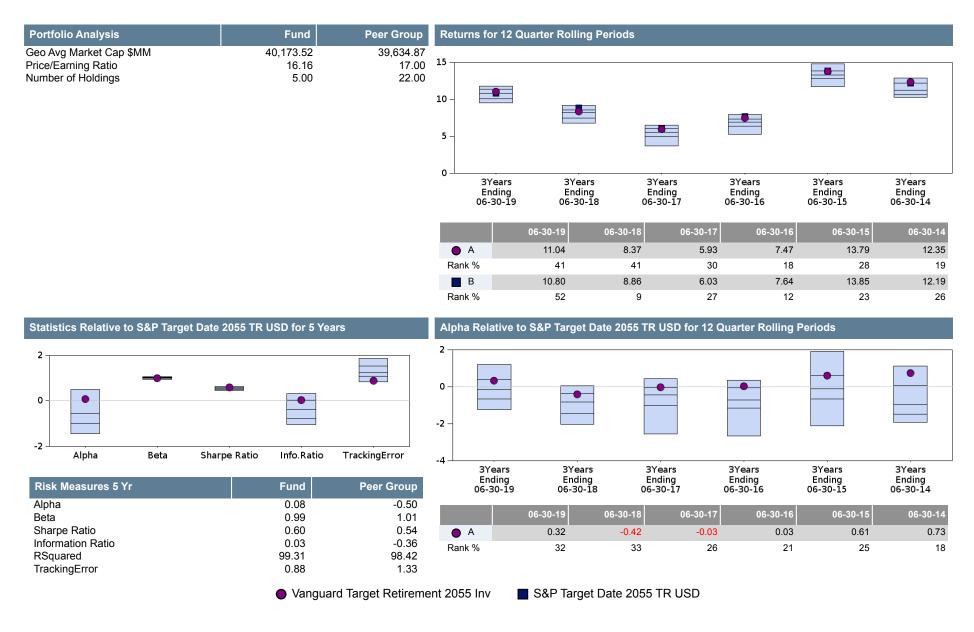
Ticker: VFFVX

Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2055 Inv

Peer Group/Category: Morningstar Target-Date 2055 Fund Manager: William Coleman Total Fund Assets: \$9.70 bn Pass Benchmark: S&P Target Date 2055 TR USD Manager Tenure: 6.33 Years Net Expense Ratio: 0.15 Criteria Criteria Fund Inception Date: 08-18-2010 Website: www.vanguard.com Fund Family: Vanguard Return 1Yr Yes Last Quarter Year to Date 3 Year 5 Year 10 Year Since Inception Net Expense Ratio 1 Year Return 5Yr Yes 3.48 15.38 5.88 11.04 6.82 10.80 Fund 1 Expense Ratio Yes 11.24 3.34 15.02 5.03 10.80 6.79 Benchmark 3.40 15.60 5.30 10.71 6.29 10.74 Peers Prod Hist Yes #Funds 238 235 224 180 137 13 43 62 34 40 27 Rank% Manager Tenure Yes AUM Yes Alpha 5Yr Yes VFFVX AvgPeer Returns for Periods Ending 06/30/2019 **Returns for Calendar Years** 20 40 -0-20 10 0 --20 0 Year to Date Last Year Last 3 Years Last 5 Years 2018 2017 2016 2015 2014 2013 2012 2011 Last Quarter Last Year Last 3 Years Last 5 Years 2018 2016 2015 2013 2012 YTD 2011 • A 3.48 15.38 5.88 11.04 6.82 • A -7.89 21.38 8.88 -1.72 7.19 24.33 15.58 -2.27 43 62 34 40 27 37 48 35 55 31 52 Rank % Rank % 16 1 3.34 15.02 5.03 10.80 -7.97 20.48 9.94 -0.54 5.64 24.96 15.81 -2.87 **B** 6.79 B Rank % 61 77 61 52 30 Rank % 40 72 8 22 57 23 37 7 Vanguard Target Retirement 2055 Inv S&P Target Date 2055 TR USD



Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2055 Inv





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2060 Inv

Returns for Calendar Years

Ticker: VTTSX

Fund

Peers #Funds

Rank%

Benchmark

Peer Group/Category: Morningstar Target-Date 2060+ Benchmark: S&P Target Date 2055 TR USD Fund Inception Date: 01-19-2012

Last Quarter

3.48

3.34

3.47

230

49

Year to Date

15.36

15.02

15.82

218

74

Fund Manager: William Coleman Manager Tenure: 6.33 Years Website: www.vanguard.com

5 Year

6.81

6.79

6.47

15

42

10 Year

11.24

0

3 Year

11.03

10.80

10.88

119

49

1 Year

5.86

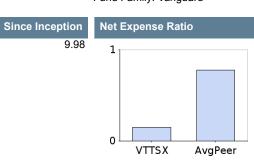
5.03

5.44

207

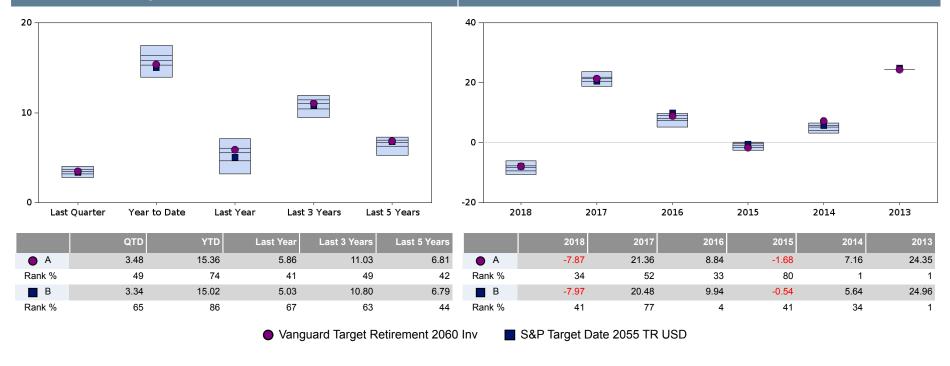
41

Total Fund Assets: \$4.08 bn Net Expense Ratio: 0.15 Fund Family: Vanguard



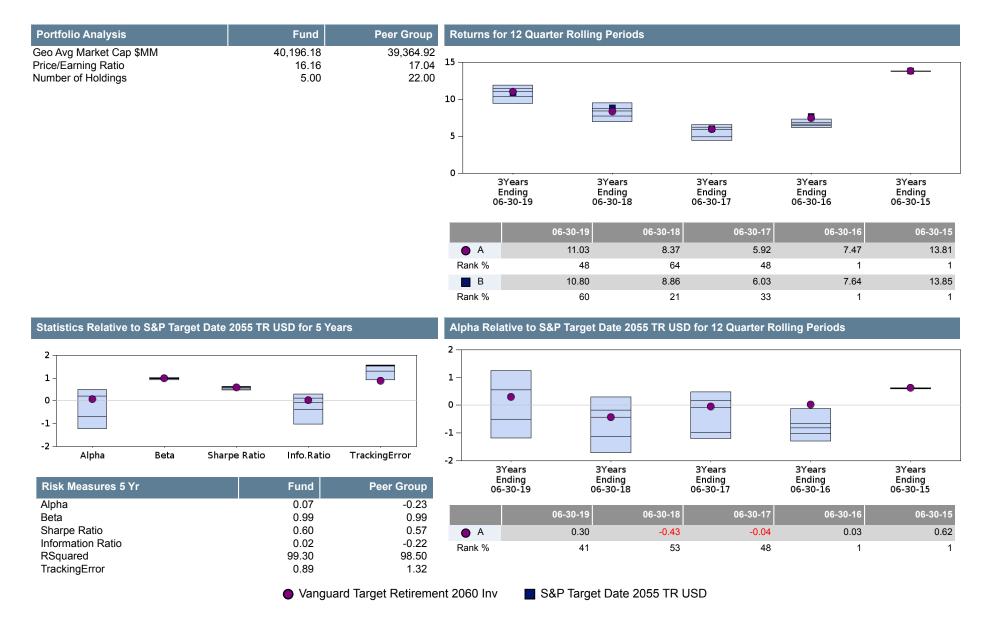
Criteria	Pass Criteria
Return 1Yr	Yes
Return 5Yr	Yes
Expense Ratio	Yes
Prod Hist	Yes
Manager Tenure	Yes
AUM	Yes
Alpha 5Yr	Yes

Returns for Periods Ending 06/30/2019



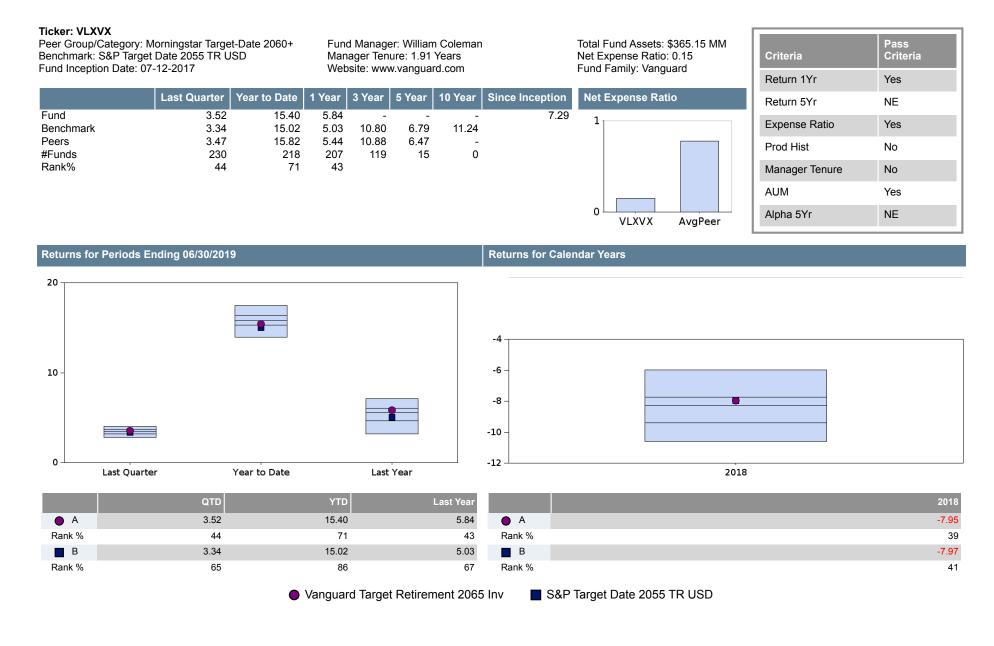


Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2060 Inv





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2065 Inv





Lansing Board of Water & Light 457(b) Deferred Compensation Plan Vanguard Target Retirement 2065 Inv

Portfolio Analysis	Fund	Peer Group	Returns for 12 Quarter Rolling Periods
Geo Avg Market Cap \$MM	40,240.56	39,364.92	
Price/Earning Ratio	16.16	17.04	Insufficient data to display graph
lumber of Holdings	5.00	22.00	
Statistics Relative to S&P Target Date 2	2055 TR USD for 5 Years		Alpha Relative to S&P Target Date 2055 TR USD for 12 Quarter Rolling Periods
Insufficient data to display graph			Insufficient data to display graph
Insufficient data to display graph Risk Measures 5 Yr	Fund	Peer Group	Insufficient data to display graph
Risk Measures 5 Yr	Fund	Peer Group -0.23	Insufficient data to display graph
			Insufficient data to display graph
Risk Measures 5 Yr Alpha		-0.23	Insufficient data to display graph
Risk Measures 5 Yr Alpha Beta		-0.23 0.99	Insufficient data to display graph
Risk Measures 5 Yr Alpha Beta Sharpe Ratio	-	-0.23 0.99 0.57	Insufficient data to display graph

Consolidated Disclosures & Definitions

Disclaimer

The information in this report is general information only and is not intended to constitute specific legal, accounting, financial or tax advice. It is provided to assist in evaluating investments relating to your retirement plan and the general investment conditions of the marketplace, but it is not intended as the sole source upon which a determination is made.

Important Disclosure Information: This report has been prepared with data believed reliable, but no representation is made as to the data's accuracy or completion. Past performance does not guarantee future results. Current performance may be lower or higher than the past performance quoted. The investment return and principal value will fluctuate and shares when sold may be worth more or less than the original cost.

RISKS:

Investing in mutual funds, which are intended as long-term investments, involves risk, including the possible loss of principal. It is important to understand that certain types of securities and/or investment strategies employed by mutual funds may expose an investor to additional inherent risks. Investments in foreign securities are subject to special additional risks, including currency risk, political risk, and risk associated with varying accounting standards. Funds invested in emerging markets may accentuate these risks. Sector funds (those funds that invest exclusively in one sector or industry), such as technology or real estate stocks, are subject to substantial volatility due to adverse political, economic, or other developments and may carry additional risk resulting from lack of industry diversification. Non-diversified funds, which invest more of their assets in a single issuer, may experience substantial volatility due to the increased concentration of investments. Funds that invest in small or midcapitalization companies may experience a greater degree of market volatility, and potential for business failure, than those of large-capitalization stocks and are riskier investments. Bond funds have the same interest rate, inflation, and credit risks as associated with the underlying bonds owned by the fund. Generally, the value of bond funds rises when prevailing interest rates fall and falls when interest rates rise. Funds that invest in lower-rated debt securities, commonly referred to as high yield or junk **bonds**, have additional risks and may be subject to greater market fluctuations and risk of loss of income and principal (relative to higher-rated securities), due to the lower credit quality of the securities and increased risk of default. Bear in mind that higher return potential is accompanied by higher risk.

Although diversification is not a guarantee against loss, it is an effective strategy to help you manage risk. There is no guarantee that a diversified portfolio will outperform a non-diversified portfolio. There are no assurances that your investment objectives will be achieved.

IMPORTANT DISCLOSURES:

You should consider the investment objectives, risks, and charges and expenses of the investment options carefully before investing. The prospectuses and other comparable documents contain this and other information about the investment options. They may be obtained by calling your record keeper. You should read the prospectuses and/or other comparable documents carefully before investing.

The performance data contained herein represents past performance, which does not guarantee future results. Investment returns and principal value will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or high than the performance data quoted. Please refer to the website listed for each fund to obtain performance data current to the most recent month-end. All total returns for the funds listed assume the reinvestment of all dividends and capital gains distributions at net asset value when paid. Furthermore, the total returns do not reflect the deduction of any initial sales charges as these charges are not applicable to eligible retirement plans. Had these sales charges been deducted, results would have been lower than shown. In certain circumstances, a back-end sales charge may be assessed upon redemption of shares within a particular timeframe. Please refer to the prospectus and/or statement of additional information for specific details. Please note that there are other charges and expenses that apply to the investment options, such as management fees, which are reflected in their net investment return.

An investment in a money market fund is neither insured nor guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although a money market fund seeks to maintain the value of your investment at \$1.00 per share, it is possible to lose money by investing in a money market fund.

The stable value funds identified are collective trust funds and are not mutual funds; consequently, they are not registered with or regulated by the U.S. Securities and Exchange Commission. They are typically operated and offered by Banks and/or Trust Companies or their affiliates and are regulated by banking regulators. For a copy of the trust's "Summary Information Booklet," please call your record keeper.

The analysis was prepared solely to help in reviewing your plan. Accordingly, it may be incomplete or contain other departures from generally accepted accounting principles and should not be used to obtain credit or for any other purpose. We have not performed an audit, review, or compilation engagement in accordance with standards established by the American Institute of Certified Public Accountants

Performance shown for separate accounts prior to the first fully funded quarter, as reflected in the report, are composite performances of the separate account managers. Composite performance has been adjusted based on the management fee of each separate account currently in place within the portfolio.

EXPLANATION OF ABBREVIATED TERMS:

Cat = Category Idx = Benchmark Index Mstar Rating = Morningstar Rating Tot Ret = Total Return AnnIzd = Annualized Exp Ratio = Expense Ratio Std Dev = Standard Deviation AUM = Assets Under Management Ticker = Ticker Symbol Pref = Preferred Stocks Conv = Convertible Bonds Mgr = Manager

Morningstar Category Classification Definitions:

U.S. Stock:

Large Value, LCV

Large-value portfolios invest primarily in large U.S. companies that are less expensive or growing more slowly than other large-cap stocks with a market cap greater than \$10 billion. Value is defined as low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Large Blend, LCB

Large-blend portfolios are fairly representative of the overall U.S. stock market in size, growth rates, and price with a market cap greater than \$10 billion. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Large Growth, LCG

Large-growth portfolios invest in big U.S. companies that are projected to grow faster than other large-cap stocks with a market cap greater than \$10 billion. Growth is defined as fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

Mid-Cap Value, MCV

The U.S. mid-cap range for market cap typically falls between \$2 - \$10 billion. Value is defined as low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Mid-Cap Blend, MCB

The U.S. mid-cap range for market cap typically falls between \$2 - \$10 billion. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Mid-Cap Growth, MCG

The U.S. mid-cap range for market cap typically falls between \$2 - \$10 billion. Growth is defined as fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

Small Value, SCV

Small-value portfolios invest in small U.S. companies with valuations and growth rates below other small-cap peers with a market cap of less than \$2 billion. Value is defined as low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Small Blend, SCB

Small-blend portfolios invest in small U.S. companies with a market cap of less than \$2 billion. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Small Growth, SCG

Small-growth portfolios invest in small U.S. companies that focus on faster-growing companies with a market cap less than \$2 billion. Growth is defined based on fast

panies with a market cap less than \$2 billion. Growth is defined

growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

Specialty-Communications, SC

Specialty-communications portfolios concentrate on telecommunications and media companies of various kinds.

Specialty-Energy, SE

Specialty-energy portfolios concentrate on stocks of energy companies. Most concentrate on companies that produce or refine oil and gas, oilfield service and equipment companies, and pipeline operators.

Specialty-Financial, SF

Specialty-financial portfolios seek capital appreciation by investing primarily in equity securities of financial-services companies, including banks, brokerage firms, insurance companies, and consumer credit providers.

Specialty-Health, SH

Specialty-health portfolios focus on the medical and health-care industries. Most invest in a range of companies, including pharmaceutical and medical-device makers to HMOs, hospitals, biotechnology and nursing homes.

Specialty-Natural Resources, SN

Specialty-natural resources portfolios focus on commodity-based industries such as energy, chemicals, minerals, and forest products.

Specialty-Precious Metals, SP

Specialty-precious metals portfolios focus on mining stocks, though some do own small amounts of gold bullion. Most portfolios concentrate on gold-mining stocks, but some have significant exposure to silver-, platinum-, and base-metal-mining stocks as well.

Specialty-Real Estate, SR

Specialty-real estate portfolios invest primarily in real-estate investment trusts (REITs) of various types. REITs are companies that develop and manage real-estate properties.

Specialty-Technology, ST

Specialty-technology portfolios focus on high-tech businesses such as computer, semiconductor, software, networking, and Internet stocks.

Specialty-Utilities, SU

Specialty-utilities portfolios seek capital appreciation by investing primarily in equity securities of public utilities including electric, gas, and telephone-service providers.

Balanced:

Convertibles, CV

Convertible bond portfolios are designed to offer some of the capital-appreciation potential of stock portfolios while also supplying some of the safety and yield of bond portfolios. To do so, they focus on convertible bonds and convertible preferred stocks. Convertible bonds allow investors to convert the bonds into shares of stock.

Conservative Allocation, CA

Conservative-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold smaller positions in stocks than moderate-allocation portfolios.

Moderate Allocation, MA

Moderate-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold larger positions in stocks than conservative-allocation portfolios.

World Allocation, IH

World-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. While these portfolios do explore the whole world, most of them focus on the U.S., Canada, Japan, and the larger markets in Europe.

Target-Date Portfolios

Target-date portfolios provide a diversified exposure to stocks, bonds, and cash for those investors who have a specific date for retirement or another goal. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Over time, management adjusts the allocation among asset classes to more conservative mixes as the target date approaches. Morningstar divides target-date funds into the following categories:

Retirement Income, Target-Date 2000, 2005, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055

International Stock:

Foreign Large Value, FV

Foreign large-value portfolios invest mainly in large international stocks that are less expensive or growing more slowly than other large-cap stocks. Most of these portfolios divide their assets among a dozen or more developed markets. These portfolios primarily invest in stocks that have a market cap greater than \$10 billion. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Foreign Large Blend, FB

Foreign large-blend portfolios invest in a variety of large international stocks. Most of these portfolios divide their assets among a dozen or more developed markets. These portfolios primarily invest in stocks that have a market cap greater than \$10 billion. The blend style is assigned to portfolios where neither growth nor value characteristics predominate.

Foreign Large Growth, FG

Foreign large-growth portfolios invest mainly in large international stocks that focus on high-priced growth stocks. Most of these portfolios divide their assets among a dozen or more developed markets. These portfolios primarily invest in stocks that have market cap greater than \$10 billion. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

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Foreign Small/Mid Value, FA

Foreign small-/mid-value portfolios invest in international stocks that are smaller and less expensive than other stocks. These portfolios primarily invest in stocks that have a market cap less than \$10 billion and divide their assets among a dozen or more developed markets. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Foreign Small/Mid Growth, FR

Foreign small-/mid-growth portfolios invest in international stocks that are smaller, growing faster, and higher-priced than other stocks. These portfolios primarily invest in stocks that have a market cap less than \$10 billion and divider their assets among a dozen or more developed markets. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields).

World Stock, WS

World-stock portfolios have few geographical limitations. It is common for these portfolios to invest the majority of their assets in the U.S., Europe, and Japan, with the remainder divided among the globe's smaller markets.

Diversified Emerging Mkts, EM

Diversified emerging-markets portfolios tend to divide their assets among 20 or more nations, although they tend to focus on the emerging markets of Asia and Latin America rather than on those of the Middle East, Africa, or Europe.

Pacific/Asia ex-Japan Stk, PJ

Pacific/Asia ex-Japan stock portfolios cover a wide geographic range. Most of these portfolios focus on export-oriented nations such as Hong Kong, Singapore, Taiwan, and Korea.

Taxable Bond:

Long Government, GL

Long-government portfolios have at least 90% of their bond holdings invested in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. They are not risk free, though. Because these portfolios have durations of more than six years (or, if duration is unavailable, average effective maturities greater than 10 years), they are more sensitive to interest rates, and thus riskier, than portfolios that have shorter durations.

Intermediate Government, GI

Intermediate-government portfolios have at least 90% of their bond holdings in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. These portfolios have durations between 3.5 and six years (or, if duration is unavailable, average effective maturities between four and 10 years).

Consequently, the group's performance—and its level of volatility--tends to fall between that of the short government and long government bond categories.

Short Government, GS

Short-government portfolios have at least 90% of their bond holdings in bonds backed by the U.S. government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the U.S. government is unlikely to default on its debt. These portfolios have durations between one and 3.5 years (or, if duration is unavailable, average effective maturities between one and four years), so they have relatively less sensitivity to interest rates, and thus low risk potential.

Inflation-Protected Bond, IP

Inflation-protected bond portfolios invest primarily in debt securities that adjust their principal values in line with the rate of inflation. These bonds can be issued by any organization, but the U.S. Treasury is currently the largest issuer for these types of securities.

Long-Term Bond, CL

Long-term bond portfolios invest primarily in corporate and other investment-grade U.S. fixed income issues and have durations of more than six years (or, if duration is unavailable, average effective maturities greater than 10 years). Due to their long durations, these portfolios are exposed to greater interest rate risk.

Intermediate-Term Bond, CI

Intermediate-term bond portfolios invest primarily in corporate and other investmentgrade U.S. fixed-income issues and have durations of 3.5 to six years (or, if duration is unavailable, average effective maturities of four to 10 years). These portfolios are less sensitive to interest rates, and therefore less volatile, than portfolios that have longer durations.

Short-Term Bond, CS

Short-term bond portfolios invest primarily in corporate and other investment-grade U.S. fixed income issues and have durations of one to 3.5 years (or, if duration is unavailable, average effective maturities of one to four years). These portfolios are attractive to fairly conservative investors, because they are less sensitive to interest rates than portfolios with longer durations.

Ultrashort Bond, UB

Ultrashort bond portfolios invest primarily in investment-grade U.S. fixed-income issues and have durations of less than one year (or, if duration is unavailable, average effective maturities of less than one year). This category can include corporate or government ultrashort bond portfolios, but it excludes international, convertible, multisector, and high yield bond portfolios. Due to their focus on bonds with very short durations, these portfolios offer minimal interest rate sensitivity and therefore low risk and total return potential.

Stable Value, SVF

Stable-value portfolios seek to provide income while preventing price fluctuations. The most common stable-value portfolios invest in a diversified portfolio of bonds and enter into wrapper agreements with financial companies to guarantee against fluctuations in their share prices. These wrapper agreements typically provide price stability on a day-

High Yield Bond, HY

High-yield bond portfolios concentrate on lower-quality bonds, which are riskier than those of higher-quality companies. These portfolios generally offer higher yields than other types of portfolios, but they are also more vulnerable to economic and credit risk. These portfolios primarily invest in U.S. high-income debt securities where at least 65% or more of bond assets are not rated or are rated by a major agency such as Standard & Poor's or Moody's at the level of BB (considered speculative for taxable bonds) and below.

Multisector Bond, MU

Multisector bond portfolios seek income by diversifying their assets among several fixed income sectors, usually U.S. government obligations, U.S. corporate bonds, foreign bonds, and high-yield U.S. debt securities. These portfolios typically hold 35% to 65% of bond assets insecurities that are not rated or are rated by a major agency such as Standard & Poor's or Moody's at the level of BB (considered speculative for taxable bonds) and below.

World Bond, IB

World bond portfolios invest 40% or more of their assets in foreign bonds. Some world bond portfolios follow a conservative approach, favoring high-quality bonds from developed markets. Others are more adventurous, and own some lower-quality bonds from developed or emerging markets. Some portfolios invest exclusively outside the U.S., while others regularly invest in both U.S. and non-U.S. bonds.

Money Market:

Taxable Money Market, TM

These portfolios invest in short-term money market securities in order to provide a level of current income that is consistent with the preservation of capital.

Index Definitions:

Fixed Income Indices

Bloomberg Barclays Aggregate Index covers the U.S. investment-grade fixed-rate bond market, including government and credit securities, agency mortgage pass-through securities, asset-backed securities, and commercial mortgage-based securities.

Bloomberg Barclays U.S. Government Bond Index is comprised of both the Treasury and Agency indices.

Bloomberg Barclays 1-3 Year Government Bond Index includes the Treasury Bond and the Agency Bond indices that have maturities of one to three years.

Bloomberg Barclays 1-3 Year Government/Credit Index includes the Bloomberg Barclays Government and Bloomberg Barclays Corporate Bond indices that have maturities of one to three years.

Bloomberg Barclays U.S. Credit Bond Index is comprised of publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements.

Bloomberg Barclays Intermediate U.S. Government/Credit Index is composed of all bonds covered by the Bloomberg Barclays U.S. Government Bond and U.S. Credit Indices with maturities between 1 and 9.99 years. The index includes all publicly issued, fixed rate, nonconvertible investment-grade corporate debt. Issues are rated at least Baa by Moody's Investors Service or BBB by S&P, if unrated by Moody's. Collateralized Mortgage Obligations (CMOs) are not included, Total return comprises price appreciation/ depreciation and income as a percentage of the original investment.

Bloomberg Barclays Long Term Government/Credit Index includes the Government and Corporate indices that have maturities of 10 years or longer.

Bloomberg Barclays Mortgage Backed Securities Index covers the mortgage-backed passthrough securities of Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

Bloomberg Barclays High Yield Index is a weighted index comprised of all fixed income securities having a maximum quality rating of Ba1 (including defaulted issues), a minimum outstanding amount of \$150 million and at least one year to maturity.

Bloomberg Barclays Global Aggregate Bond Index provides a broadbased measure of the global investment-grade fixed income markets. The three major components of this index are the U.S. Aggregate, the Pan-European Aggregate, and the Asian-Pacific Aggregate Indices, The index also includes Eurodollar and Euro-Yen corporate bonds, Canadian Government securities, and USD investment grade 144A securities.

Bloomberg Barclays Capital U.S. TIPS Index measures the performance of inflation-protected bonds.

Bloomberg Barclays Capital U.S. Universal Index measures represents the union of the U.S. Aggregate Index, U.S. Corporate High-Yield, Investment Grade 144A Index, Eurodollar Index, U.S. Emerging Markets Index, and the non-ERISA eligible portion of the CMBS Index. The index covers USD- denominated, taxable bonds that are rated either investment-grade or below investment-grade.

Bloomberg Barclays Intermediate Government Bond Index includes those indices found in the Bloomberg Barclays Government Index that have a maturity of one to three years.

Bloomberg Barclays Long Term Government Bond Index includes those indexes found in the Bloomberg Barclays Government index, which has a maturity of 10 years or more. The returns we publish for the index are total returns, which include reinvestment of dividends.

Morgan Stanley Capital International (MSCI) Indices

MSCI EAFE Index is a weighted, unmanaged index of the performance of 1,100 securities in major overseas stock markets of Europe Australasia, and the Far East.

MSCI EAFE Growth Index includes those firms in the MSCI EAFE Index with higher Price/Book Value (P/B ratios relative to their respective MSCI country index.

MSCI EAFE Value Index includes those firms in the MSCI EAFE Index with lower Price/Book Value (P/BV) ratios relative to their respective MSCI country index.

MSCI EAFE Small Cap Index includes small cap firms in the MSCI EAFE Index

MSCI World Index is a weighted, unmanaged index of the performance of approximately 1,500 securities listed on the stock exchanges of the U.S., Europe, Australia, and the Far East.

MSCI Pacific ex. Japan index measures the performance of stock markets in Australia, Hong Kong, New Zealand, and Singapore, and Malaysia.

MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The MSCI Emerging Markets Index consisted of the following 26 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela.

MSCI AC Pacific Index is a free float-adjusted market capitalization index that is designed to measure the equity market performance in the Pacific region. The MSCI AC Pacific Index consisted of the following 12 emerging and developed market countries: Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, and Thailand.

Dow Jones Indices

Dow Jones Aggressive Portfolio Index is a benchmark designed for asset allocation strategists who are willing to take 100% of the risk of the global securities market.

Dow Jones Conservative Portfolio Index is a benchmark designed for asset allocation strategists who are willing to take 20% of the risk of the global securities market.

Dow Jones Moderate Portfolio Index is a benchmark designed for asset allocation strategists who are willing to take 60% of the risk of the global securities market.

Dow Jones U.S. Industry Indexes are the benchmarks designed for specific sectors which represent approximately 95% of U.S. market capitalization. The indexes are: **DJ U.S. Basic Material Index, Consumer Goods Index, Consumer Services Index, Financials Index, Heath Care Index, Industrials Index, Oil & Gas Index, Technology Index, Telecommunications Index, and the Utilities Index.**

Russell Style Indices

The **Russell 3000**® **Index** measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 90% of

the investable U.S. equity market. Subsets of this index include the **Russell 2000**® **Index**, which measures the performance of the 2,000 smallest companies in the Russell 3000, the **Russell 1000**® Index, which measures the performance of the 1,000 largest companies in the Russell 3000. The Russell 2000 Value Index, Russell 1000 Value Index and Russell Midcap Value Index measure the performance of those companies in the respective broad index with lower price-to-book ratios and lower forecasted growth values. The Russell 2000 Growth Index, Russell 1000 Growth Index and Russell Midcap Value the performance of those companies in the respective broad index with lower price-to-book ratios and lower forecasted growth values.

Standard & Poor's Indices

The **Standard & Poor's 500** is an unmanaged capitalization-weighted index of 500 stocks generally representative of large companies (as measured by market capitalization). The **Standard & Poor's Midcap 400**® and **Small cap 600**® are unmanaged indices generally representative of mid-sized and small companies respectively. Investors cannot invest directly in an index.

S&P Target Date Indexes are representative of the investment opportunity available to investors through existing target date funds with asset class exposures driven by a survey of such funds for each particular target date. The series is comprised of the following nine indicies: **S&P Target Date Retirement Income, 2010, 2015, 2020, 2025, 2030, 2035, 2040, and 2045+**.

S&P Goldman Sachs Commodity Indexes contains composite index of commodity sectors which represents a broadly diversified, unleveraged, long-only position in commodity futures. The indexes includes: Energy, Industrial Metals, Precious Metals, Agriculture, Livestock, and Natural Resources.

S&P 1500 Energy Index is an unmanaged capitalization-weighted index comprising of companies in the Energy sector as determined by S&P.

Glossary:

12b-1 Fees

A fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund.

Annualized Returns

Returns for periods longer than one year are expressed as "annualized returns." This is equivalent to the compound rate of return which, over a certain period of time, would produce a fund's total return over that same period.

Alpha

Alpha is a measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. A positive alpha

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figure indicates the portfolio has performed better than its beta would predict. In contrast, a negative alpha indicates the portfolio has underperformed, given the expectations established by beta.

Asset Allocation

Income and capital appreciation are dual goals for funds in this objective. Managers often use a flexible combination of stocks, bonds, and cash; some, but not all, shift assets frequently based on analysis of business-cycle trends.

Benchmark

Benchmark is a measure to compare the fund's returns with to judge its performance.

Beta

A measure of a fund's sensitivity to market movements. The beta of the market is 1.00 by definition. Morningstar calculates beta by comparing a fund's excess return over Treasury bills to the market's excess return over Treasury bills, so a beta of 1.10 shows that the fund has performed 10% better than its benchmark index in up markets and 10% worse in down markets, assuming all other factors remain constant. Conversely, a beta of 0.85 indicates that the fund's excess return is expected to perform 15% worse than the market's excess return during up markets and 15% better during down markets.

Category Average

Category averages measure how a category performed over a specific time period while correcting for the effects of survivorship-bias, recently-incepted funds and category changes.

Category Percentile Ranking

The fund's total-return percentile rank relative to all funds that have the same Morningstar Category. The highest (or most favorable) percentile rank is 1 and the lowest (or least favorable) percentile rank is 100. The top-performing fund in a category will always receive a rank of 1.

Expense Ratio

The percentage of fund assets paid for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Sales charges are not included in the expense ratio.

Plan Inception Date

Date that the fund, regardless of share class, was added to the Plan.

Inception Date

Date the fund commenced operations.

Index Funds

Index funds are funds that track a particular index and attempt to match its returns. While index funds typically have a much larger portfolio than a mutual fund, the index fund's management may study the index's movements to develop a representative sampling, and match sectors proportionately.

Information Ratio

The information ratio is a measure of the consistency of excess return. The ratio is calculated by taking the annualized excess return over a benchmark (numerator) and dividing it by the standard deviation of excess return (denominator).

Manager

The name of the individual or individuals who are employed by the advisor or subadvisor who are directly responsible for managing the fund's portfolio

Manager Tenure

The number of years that the current manager has been the portfolio manager of the fund. For funds with more than one manager, the average tenure is shown.

Median Market Cap

Median refers to the midpoint of the range numbers that are arranged in order of value (lowest to highest). The market cap is the company's value, determined by multiplying the current number of shares outstanding by the current stock price for one share.

Morningstar Category

The investment category assigned by Morningstar based on the underlying securities in each portfolio. Morningstar categories help make meaningful comparisons between funds

Morningstar Rating

Morningstar rates mutual funds from 1 to 5 stars based on how well they've performed (one being the lowest, 5 stars being the highest possible ranking) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive 5 stars and the bottom 10% receives 1 star. Funds are rated for up to three time periods-three, five-, and 10-years and these ratings are combined to produce an overall rating.

Price/Earnings Ratio

Ratio used to compare a company's current share price to its per share earnings. It is calculated by dividing the market value per share by the earnings per share.

R-squared

R-squared measures (on a scale of 0 to 100) the amount of movement of a fund's return that can be explained by that fund's benchmark. An R-squared of 100 means that all movements of a fund are completely explained by movements in the associated index (benchmark).

Redemption Fee

An annual amount charged when assets are withdrawn from some funds. Unlike deferred fees, however, some redemption fees go back into the fund itself, rather than into the fund company's pockets, and thus do not represent a net cost to shareholders.

Share Classes

Shares of the same fund that offer different shareholder rights and obligations, such as different fee and load charges. Common share classes are A (front-end load), B (deferred fees), C (no sales charge and a relatively high annual 12b-1 fee, such as 1.00%). Multi-class funds hold the same investment portfolio for all classes, and differ only in their surrounding fee structure.

Sharpe Ratio

The Sharpe Ratio is a risk-adjusted measure. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the portfolio's historical risk-adjusted performance. It can be used to

compare two portfolios directly on how much excess return each portfolio achieved for a certain level of risk.

Peer Benchmark

A proprietary tailored benchmark based on the average performance of appropriate peer groups. The weightings of each average peer group return varies over time to make it comparable to the weightings of the portfolio over the same periods. Comparing portfolio performance to this benchmark helps to assess performance against peers. The Benchmark was rebalanced quarterly.

Weighted Benchmark

A tailored benchmark constructed of a combination of investment indexes weighted based on the individual manager's allocations within the overall portfolio. Specific components of the Weighted Benchmark may include the Bloomberg Barclays Capital U.S. Aggregate Index, the Russell 3000 Index, and the MSCI EAFE Index. Other indexes may be included that PMFA feels appropriately represents the manager or peer group.

Time Weighted Return (TWR)

A method of calculating the return of an investment or portfolio that gives the same weight to time periods, regardless of cash flows into or out of the investment or portfolio. Because TWR eliminates or substantially reduces the impact of cash flows on a portfolio, it is the calculation that fairly compares the performance of the portfolio to another manager or index. However, certain underlying assumptions must be made relative to cash flows in calculating TWR that may result in nominal differences in calculated returns reported by different sources for a given period. Returns greater than 1 year are annualized.

Cumulative Return

The profit or loss, calculated as a percentage, on a given investment or portfolio of investments over a given period of time. Within the context of this report, cumulative return measures the return of the portfolio and broad index since inception through the date of this report.

Ticker

This symbol represents a fund's or a company's stock on an exchange. The ticker can be the most dependable way to identify a security, because it is less likely to change than a security name

Stable Value Disclosure

Some collective trusts engage in securities lending programs in an effort to add additional return for investors. Securities lending programs are associated with various risks, including those associated with collateral management and counterparties.

For Stable Value funds, fees include wrap fees, sub-advisor management fees, management fees, revenue sharing, and administrative fees. Stable Value funds may calculate performance differently depending on their use of sub-advisors and calculation methodology. Detailed performance calculations are available for each Stable Value fund upon request.

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LANSING BOARD OF WATER AND LIGHT DEFINED CONTRIBUTION PLAN AND TRUST 1

STATEMENT OF INVESTMENT POLICIES, PROCEDURES AND OBJECTIVES

Effective November 13, 2018, except as otherwise noted herein

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SUMMARY OF PURPOSE AND OBJECTIVES

Plan Purpose and Objectives

The Lansing Board of Water and Light ("BWL") is a municipal utility providing drinking water, electricity, steam and chilled water services to the greater Lansing area in mid-Michigan.

This Statement of Investment Policies, Procedures and Objectives ("Statement") is issued by the Commissioners of the Lansing Board of Water and Light (the "Commissioners") for the Lansing Board of Water and Light Defined Contribution Plan and Trust 1 (the "Plan").

The Plan covers the eligible employees of the BWL and its related entities according to the terms of the Plan document, with the objective of offering participants the opportunity to save, manage, accumulate and preserve retirement account assets.

The Trustees of the Plan are the eight appointed voting Commissioners of the Lansing Board of Water and Light. Non-voting Commissioners are not Trustees of the Plan. The Trustees have delegated certain responsibilities that are described in this Statement to the Retirement Plan Committee (the "Committee"), effective as of the date on which this Statement is acknowledged by the Trustees. As of that date, all provisions in this Statement relating to the Committee shall become operative.

Responsibility for selecting Investment Managers, Investment Consultants, and other investment service providers required for the management of the Plan's assets and for evaluating overall investment results has been delegated to the Committee which shall report to the Trustees regarding selections made and investment performance. The Trustees must evaluate the Committee's actions in light of the Committee's responsibilities under the terms of this Statement, as updated from time to time by the Commissioners, and as communicated to the Trustees by the Commissioners in writing.

Decisions regarding investment options will be made in the sole interest of the participants and beneficiaries of the Plan. All Plan assets may be invested at the discretion of the participant, or if permitted, their beneficiary, in investment options selected from a group of alternatives made available by the Plan. The number and types of investment alternatives available and the Investment Managers retained to manage the alternatives are subject to change.

The provisions of the Statement are subject to the terms of the Plan and the agreement establishing the Trust maintained pursuant to the Plan. To the extent of any conflict between this Statement and the terms of the Plan, the terms of such Plan control. This Statement does not provide any additional rights to any party other than those that are described in those documents. Any investment advisory agreement that is entered into from time to time by the Committee must be subject to the terms of this Statement.

Purpose of the Statement

The purpose of this Statement is to assist the Committee in effectively selecting, supervising, and evaluating the investment options provided under the Plan. The primary focus of this Statement is to:

- 1. Clearly describe and distinguish among the responsibilities of the Committee, the Investment Managers, the Third Party Administrator, the Custodian, the Trustee, the Investment Consultant, and any additional service providers.
- 2. Establish formal criteria to select and monitor the investment options under the Plan; and
- 3. Facilitate communication between the Committee and all service providers.

The Commissioners retain the authority to approve, revise and update this Statement as necessary to ensure that it is consistent with BWL's investment philosophy. Any revisions or

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updates made to the Statement shall be communicated to the Trustees and the Committee from time to time in writing. The Trustees shall formally acknowledge any revisions or updates by communicating the same to the Commissioners in writing. It shall be the duty of the Trustees to act strictly in accordance with the Statement, and any changes therein, as so communicated to and acknowledged by the Trustees.

ROLES AND RESPONSIBILITIES

Lansing Board of Water and Light Retirement Plan Committee

The Committee is responsible for overseeing the administration of the Plan and investment of the Plan assets. Its duties include executing this Statement, hiring investment service providers, and monitoring and evaluating the performance of service providers in carrying out this Statement.

The responsibilities of the Committee, as delegated by the Trustees, include:

- 1. Establishing, monitoring, reviewing and modifying the number and types of investment options available to Plan participants, including default options for participants who fail to make investment elections.
- 2. Conducting appropriate due diligence in the selection of all investment service providers.
- 3. Retaining investment service providers as necessary, including, but not limited to investment advisors and consultants, and investment managers.
- 4. Establishing effective communication procedures among all investment service providers and the Committee.
- 5. Monitoring the success of the investment program in meeting established objectives including appropriateness of funds offered and fund performance.
- 6. Ensuring that the Plan's investment options are appropriately communicated to participants by working with the Plan sponsor toward that goal.

Investment Consultant

The primary role of the Investment Consultant is to assist the Retirement Plan Committee in fulfilling its responsibilities by providing information, analysis and a prudent process that contribute to the success of the investment program. Specifically, the responsibilities of the Investment Consultant are as follows:

- 1. Assisting the Retirement Plan Committee in selecting investment options that provide Plan participants with the ability to construct a diversified portfolio at the appropriate risk level.
- 2. Assisting in identifying appropriate market benchmarks and peer groups for the evaluation of each investment option.
- 3. Assisting in a prudent Investment Manager search process, identifying appropriate candidates for review and selection by the Retirement Plan Committee.
- 4. Monitoring the investment management firms and investment options on an on-going basis and informing the Retirement Plan Committee of material developments.
- 5. As requested, assisting in educating the Retirement Plan Committee on investment issues that might impact the Plan.
- 6. Assisting the Retirement Plan Committee in analyzing fees and summarizing fees paid to various service providers.
- 7. Keeping abreast of and updating the Committee on the legislative environment, industry trends, and Plan design options.

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8. In addition to the above services, the Investment Consultant is responsible for any other services listed in the Investment Advisory Agreement.

Custodian (Directed Trustee)

The Custodian provides the services listed below:

- 1. Adequate safekeeping services.
- 2. Accurate and timely pricing of securities.
- 3. Timely settlement of securities transactions.
- 4. Timely collection of income.
- 5. Suitable accounting services.
- 6. Appropriate data processing capabilities.
- 7. Communication with the Committee regarding any concerns or issues with respect to such services.
- 8. In addition to the above services, the Custodian is responsible for any other services listed in the Custodial Service Agreement.

Third Party Administrator (TPA)/Record Keeper

The TPA provides the services listed below.

- 1. Suitable and accurate participant record keeping and administrative services.
- 2. Accurately and timely provide Plan data and reports to the Committee upon request.
- 3. Compliance testing and required form filing services, if applicable.
- Participant services including quarterly statements, Voice Response Unit (VRU) access, access to phone representatives, and Web access to participant account information and transactions.
- 5. Notification to the Committee of any concerns or issues with respect to such services.
- 6. In addition to the above services, the TPA is responsible for any other services listed in the Third Party Service Agreement.

Investment Managers

The specific duties and responsibilities of each Investment Manager are as follows:

- 1. To manage the Plan assets under its supervision in accordance with guidelines and objectives included in each Investment Manager's agreement, or in accordance with the prospectus for mutual funds and consistent with each Investment Manager's stated investment philosophy and style as presented to the Investment Consultant.
- 2. To exercise investment discretion in regard to buying, managing and selling assets held in the portfolio, subject to any limitations contained in this document and the Investment Manager's agreement or prospectus.

See Plan's quarterly investment monitoring report for listing of all Investment Managers.

INVESTMENT OPTION POLICIES

Selection of Investment Options

The Committee will determine, through an understanding of eligible participants, the most appropriate number and type of investment options to offer, and which specific Investment Manager to employ for each investment option. With the assistance of the Investment Consultant, the Committee has selected the asset classes and Investment Managers to represent the investment options shown in the Plan's quarterly investment monitoring report.

Default Investment

The discretionary assets of participants who do not make an active selection among the available options will be placed in the Plan's default fund(s). Defaulted assets will be placed into the appropriate target date fund based on the age and assumed time to retirement of the participant.

Description of Investment Options

In order to provide appropriate investment alternatives for participants, a diversified menu of investment options is to be made available under the Plan. The specific investment options available under the Plan are identified in the Plan's quarterly investment monitoring report. Below is a description of the asset classes that may be offered in the Plan:

Money Market

Investments in short term, high-quality securities with very limited principal risk (or risk commensurate with other money market funds). The interest rate for investments in this asset class will be a function of short-term rates for assets held.

Stable Income

The objective of this asset class is to preserve capital and to provide a reasonably predictable return that moves generally in the direction of prevailing interest rates.

Defensive/Short-Term Bond

The objective of this asset class is to limit volatility risk and loss of principal while achieving a competitive rate of return that will, over the long-term, be superior to money market returns. Funds in this asset class generally invest in a diversified portfolio of fixed income securities with an average maturity of less than 4 years.

Broad/Intermediate-Term Bond

The objective of this asset class is to provide a bond alternative that will have more interest rate risk and, hopefully, provide more return than defensive fixed income or money market options. Options in this asset class will generally invest in a diversified portfolio of fixed income securities with an average maturity of greater than four years (not to exceed 15 years) or inflation protected securities.

High Yield Bond

The objective of this asset class is to provide a bond alternative that will invest primarily in lower quality issues that offer higher yields than investment grade bonds. It is understood that there will also be an increased level of credit risk and volatility within this asset class when compared to higher quality bond asset classes. The average credit quality of options in this asset class should be below BBB and the average maturity should be less than 15 years.

International Bond

The objective of this asset class is to provide a bond alternative that will invest primarily in non-U.S. issuers. Options in this asset class should be diversified by geographic region and by individual issue. They may be denominated in U.S. dollars. The average maturity of options in this asset class should be less than 15 years.

Multi-Sector Bond

The objective of this asset class is to provide a bond alternative that will invest in a diversified portfolio of fixed income securities that may include both credit and government oriented issues, as well as U.S.- based issuers and non-U.S. issuers.

Balanced/Asset Allocation

The objective of this asset class is to provide varying levels of exposure in domestic and foreign common stocks and fixed-income securities.

Target Date Investment

The objective of this asset class is to provide options that vary in risk and return based on a target retirement date. The option is designed to provide those participants that want to make an investment decision based on their target retirement date the ability to do so. The portfolios will be reallocated with greater emphasis on more conservative investments as the participant nears the stated retirement date.

Domestic Stock

The objective of this asset class is to provide an alternative that has investment performance that is highly correlated to the U.S. stock markets. These investment options can be designed to utilize the expertise of a manager that can attempt to add value to overall U.S. stock market returns or designed as an index option that attempts to match the performance of an index. The Plan may utilize options with different investment styles (growth, value or index) and market capitalizations (large, medium, and small) to pursue returns equal to or greater than the broad markets. Risk is acceptable given the commitment to equity securities; however, risk (as measured by standard deviation) beyond the comparative broad market should be taken only if the reasonably anticipated incremental return justifies it over an appropriate comparable time frame. The median market capitalization of a fund within this category should be representative of a particular asset class (e.g., small company). Funds that invest in certain sectors of the market (e.g., REITS, healthcare, utilities, technology, etc.) are allowed as investment options under the Plan, but should be diversified in the number of securities owned. Before adding sector funds as investment options under the Plan, careful consideration should be given to the diversity of the existing investment options and the sophistication level of the Plan participants, as all participants would be allowed to invest in such a fund.

Developed International Stock

The objective of this asset class is to provide an option that generally invests in a diversified portfolio of non-U.S. companies in developed markets that are primarily denominated in foreign currencies. Risk is acceptable given the commitment to non-U.S. equity securities; however, risk (as measured by standard deviation) beyond the comparative broad market should be taken only if the reasonably anticipated incremental return justifies it over an appropriate comparable time frame.

Emerging Markets International

The objective of this asset class is to provide an option that invests in a diversified portfolio of non-U.S. companies, in emerging markets, that are primarily denominated in foreign currencies. Risk is acceptable given the commitment to equity securities of emerging countries; however, risk (as measured by standard deviation) beyond the comparative broad market should be taken only if the reasonably anticipated incremental return justifies it over an appropriate comparable time frame.

Commodity

The objective of this asset class is to provide an option that invests primarily in commodities either directly or through future contracts of commodities. Investing in commodities is offered to provide an asset that has generally lower correlation with the broad stock and bond markets, and to potentially provide a hedge against increased inflation. Risk is acceptable given the commitment to commodities; however, risk (as measured by standard deviation) beyond the comparative broad commodity index should be taken only if the reasonably anticipated incremental return justifies it over an appropriate comparable time frame.

Real Asset

The objective of this asset class is to achieve positive long-term real returns, provide inflation protection by investing in a broadly diversified basket of assets with inflation-sensitive characteristics, and enhance portfolio diversification. Options in this asset class typically invest in a variety of asset classes that include, but may not be limited to, the following: inflation-indexed bonds (TIPS), floating rate debt, real estate investment trusts (REITs), commodity index-linked instruments, natural resource equities, master limited partnerships (MLPs), and publicly-listed infrastructure equities.

Self-Directed Brokerage Account

Self-Directed Brokerage Accounts (SDBA) allow participants to invest all or a portion of their Plan account balance into investment options available through the brokerage service. Some of the investment options that may be available to participants through the SDBA include stocks, bonds and mutual funds. Investment options within the SDBA are not monitored by BWL, the Committee, or the Investment Consultant. The Investment Consultant is not compensated on assets held within the SDBA.

PERFORMANCE OBJECTIVES

Time Horizon

The Committee acknowledges that securities markets are characterized by fluctuating rates of return, particularly during short-term time periods. Accordingly, the Committee focuses on time horizons of three years and greater (e.g. a full market cycle) in evaluating the asset class and investment option performance relative to established benchmarks.

Performance Objectives

Based on the analysis that led to asset allocation and investment option decisions, the Committee has identified performance benchmarks for each investment option and the separate mandates within multiple manager options. The relevant benchmarks for specific investment options are listed in the Plan's guarterly investment monitoring report.

The Plan's investment options will be selected to:

- 1. Seek to maximize return within reasonable and prudent levels of risk.
- 2. Provide investment returns comparable to returns for investment options having similar investment objectives and risk profiles.
- 3. Provide a diverse portfolio of investment options covering a broad range of asset classes.
- 4. Control administrative and management costs.

INVESTMENT OPTION SELECTION AND EVALUATION

Investment Option Selection

The Plan is subject to the Internal Revenue Code and Michigan Public Act 314 of 1965, as amended. Therefore, the Committee's intent is to follow a process that embodies the principles of procedural due diligence. Accordingly, when selecting investment options, the Committee, with the assistance of the Investment Consultant, will employ a competitive search process, which includes the following steps:

- 1. Identification of qualified candidates from Investment Manager search databases used by the Investment Consultant.
- 2. Analysis of qualified candidates in terms of:
 - Quantitative characteristics, such as GIPS-compliant composite return data, risk-adjusted rates of return and relevant portfolio characteristics.
 - Qualitative characteristics, such as key personnel, investment philosophy, investment strategy, research orientation, decision-making process, and risk controls.
 - Organizational factors, such as type and size of firm, ownership structure, client-servicing capabilities, client growth and retention, and fees.
- 3. Selection of finalist candidates based on a due diligence process. Investment options should meet the following minimum criteria:
 - Investment options should correspond to the asset classes outlined in this Statement. For example, the domestic stock component of this Statement could be implemented with a stock mutual fund invested primarily in domestic stocks.
 - An Investment Manager should have been acting in a portfolio manager capacity for three years or more, or must have a long term track record managing assets with a similar style at another mutual fund or investment management firm.
 - The same investment strategy should have been followed by the fund for at least three consecutive years (or, where applicable, the Investment Manager should have followed the same investment strategy for at least three consecutive years with regard to whatever fund(s) he or she managed during that three consecutive year period).
 - Each investment option should have total net assets exceeding \$300 million.
 - Each investment option should have a net expense ratio that is lower than the median (50th percentile) of their peer group unless above median expenses are justified by superior risk adjusted performance.

Performance Evaluation and Review

With the assistance of the Investment Consultant, the Committee will regularly evaluate the performance of each investment option. In evaluating each investment option, the Committee will consider qualitative factors likely to impact the future performance of the investment option in addition to current and historical rates of return.

The Committee has deemed it appropriate to establish objective standards for initiating a formal review of an Investment Manager. Any of the following three conditions may be considered cause to initiate a formal review:

Lansing Board of Water and Light November 2018

- 1. *Organizational Disruption.* Examples of material organizational events that will be evaluated prior to a termination decision include:
 - Ownership changes (e.g., key people "cash out")
 - Key people leave firm
 - Manager changes within the strategy
 - Investment management firm is involved in material litigation
 - Material client-servicing problems
- 2. Long-term underperformance (defined as five years) in relation to an appropriate broad market index, the median of an appropriate peer group, and risk. If an investment option fails to generate a return premium, net of fees, in excess of the designated index or indices, performs below the median (50th percentile) of its peer group, and/or has below average alpha (compared to its peer group), then, upon completion of appropriate due diligence, the Committee may decide to eliminate that investment option under the Plan.
- 3. Shorter-term performance in relation to appropriate style index and the median of an appropriate peer group. A due diligence review process, which may lead to termination, will be initiated if an investment option ranks in the 4th quartile over a one-year period.

A review process may include the following steps:

- 1. Communication with the Investment Manager and/or a representative from the investment management firm stating the reasons for the review, the steps of the review and the possible results (retain or terminate).
- 2. A quantitative analysis of the portfolio during the period of underperformance. The analysis will focus on attribution of returns and evaluation of characteristics of the portfolio relative to the investment option's stated style and relative to the characteristics of portfolios that performed well during the period in question.
- 3. A conference call and/or meeting with representatives of the investment management firm to gain insights into any organizational and managerial staff changes.
- 4. A review of information gathered from the quantitative analysis and interview. The review may lead to a decision to retain the investment option in a normal capacity, retain subject to improvement over a six-month to one-year period, or terminate.

The Committee reserves the right to remove any investment option at its discretion. However, the decision to retain or remove an investment option cannot be made by a formula. It is a judgment that is dependent on the Committee's confidence in future performance.

REVENUE SHARING POLICIES

The Retirement Plan Committee, with the assistance of the Investment Consultant, will analyze disclosed total fees, including revenue sharing and all other disclosed forms of compensation, on an annual basis to determine reasonableness of aggregate fees for services provided. Related ongoing legal developments will be considered.

LANSING BOARD OF WATER AND LIGHT DEFINED CONTRIBUTION PLAN AND TRUST 2

STATEMENT OF INVESTMENT POLICIES, PROCEDURES AND OBJECTIVES

Effective November 13, 2018, except as otherwise noted herein

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SUMMARY OF PURPOSE AND OBJECTIVES

Plan Purpose and Objectives

The Lansing Board of Water and Light ("BWL") is a municipal utility providing drinking water, electricity, steam and chilled water services to the greater Lansing area in mid-Michigan.

This Statement of Investment Policies, Procedures and Objectives ("Statement") is issued by the Commissioners of the Lansing Board of Water and Light (the "Commissioners") for the Lansing Board of Water and Light Defined Contribution Plan and Trust 2 (the "Plan").

The Plan covers the eligible employees of the BWL and its related entities according to the terms of the Plan document, with the objective of offering participants the opportunity to save, manage, accumulate and preserve retirement account assets.

The Trustees of the Plan are the eight appointed voting Commissioners of the Lansing Board of Water and Light. Non-voting Commissioners are not Trustees of the Plan. The Trustees have delegated certain responsibilities that are described in this Statement to the Retirement Plan Committee (the "Committee"), effective as of the date on which this Statement is acknowledged by the Trustees. As of that date, all provisions in this Statement relating to the Committee shall become operative.

Responsibility for selecting Investment Managers, Investment Consultants, and other investment service providers required for the management of the Plan's assets and for evaluating overall investment results has been delegated to the Committee which shall report to the Trustees regarding selections made and investment performance. The Trustees must evaluate the Committee's actions in light of the Committee's responsibilities under the terms of this Statement, as updated from time to time by the Commissioners, and as communicated to the Trustees by the Commissioners in writing.

Decisions regarding investment options will be made in the sole interest of the participants and beneficiaries of the Plan. All Plan assets may be invested at the discretion of the participant, or if permitted, their beneficiary, in investment options selected from a group of alternatives made available by the Plan. The number and types of investment alternatives available and the Investment Managers retained to manage the alternatives are subject to change.

The provisions of the Statement are subject to the terms of the Plan and the agreement establishing the Trust maintained pursuant to the Plan. To the extent of any conflict between this Statement and the terms of the Plan, the terms of such Plan control. This Statement does not provide any additional rights to any party other than those that are described in those documents. Any investment advisory agreement that is entered into from time to time by the Committee must be subject to the terms of this Statement.

Purpose of the Statement

The purpose of this Statement is to assist the Committee in effectively selecting, supervising, and evaluating the investment options provided under the Plan. The primary focus of this Statement is to:

- 1. Clearly describe and distinguish among the responsibilities of the Committee, the Investment Managers, the Third Party Administrator, the Custodian, the Trustee, the Investment Consultant, and any additional service providers.
- 2. Establish formal criteria to select and monitor the investment options under the Plan; and
- 3. Facilitate communication between the Committee and all service providers.

The Commissioners retain the authority to approve, revise and update this Statement as necessary to ensure that it is consistent with BWL's investment philosophy. Any revisions or

updates made to the Statement shall be communicated to the Trustees and the Committee from time to time in writing. The Trustees shall formally acknowledge any revisions or updates by communicating the same to the Commissioners in writing. It shall be the duty of the Trustees to act strictly in accordance with the Statement, and any changes therein, as so communicated to and acknowledged by the Trustees.

ROLES AND RESPONSIBILITIES

Lansing Board of Water and Light Retirement Plan Committee

The Committee is responsible for overseeing the administration of the Plan and investment of the Plan assets. Its duties include executing this Statement, hiring investment service providers, and monitoring and evaluating the performance of service providers in carrying out this Statement.

The responsibilities of the Committee, as delegated by the Trustees, include:

- 1. Establishing, monitoring, reviewing and modifying the number and types of investment options available to Plan participants, including default options for participants who fail to make investment elections.
- 2. Conducting appropriate due diligence in the selection of all investment service providers.
- 3. Retaining investment service providers as necessary, including, but not limited to investment advisors and consultants, and investment managers.
- 4. Establishing effective communication procedures among all investment service providers and the Committee.
- 5. Monitoring the success of the investment program in meeting established objectives including appropriateness of funds offered and fund performance.
- 6. Ensuring that the Plan's investment options are appropriately communicated to participants by working with the Plan sponsor toward that goal.

Investment Consultant

The primary role of the Investment Consultant is to assist the Retirement Plan Committee in fulfilling its responsibilities by providing information, analysis and a prudent process that contribute to the success of the investment program. Specifically, the responsibilities of the Investment Consultant are as follows:

- 1. Assisting the Retirement Plan Committee in selecting investment options that provide Plan participants with the ability to construct a diversified portfolio at the appropriate risk level.
- 2. Assisting in identifying appropriate market benchmarks and peer groups for the evaluation of each investment option.
- 3. Assisting in a prudent Investment Manager search process, identifying appropriate candidates for review and selection by the Retirement Plan Committee.
- 4. Monitoring the investment management firms and investment options on an on-going basis and informing the Retirement Plan Committee of material developments.
- 5. As requested, assisting in educating the Retirement Plan Committee on investment issues that might impact the Plan.
- 6. Assisting the Retirement Plan Committee in analyzing fees and summarizing fees paid to various service providers.
- 7. Keeping abreast of and updating the Committee on the legislative environment, industry trends, and Plan design options.

8. In addition to the above services, the Investment Consultant is responsible for any other services listed in the Investment Advisory Agreement.

Custodian (Directed Trustee)

The Custodian provides the services listed below:

- 1. Adequate safekeeping services.
- 2. Accurate and timely pricing of securities.
- 3. Timely settlement of securities transactions.
- 4. Timely collection of income.
- 5. Suitable accounting services.
- 6. Appropriate data processing capabilities.
- 7. Communication with the Committee regarding any concerns or issues with respect to such services.
- 8. In addition to the above services, the Custodian is responsible for any other services listed in the Custodial Service Agreement.

Third Party Administrator (TPA)/Record Keeper

The TPA provides the services listed below.

- 1. Suitable and accurate participant record keeping and administrative services.
- 2. Accurately and timely provide Plan data and reports to the Committee upon request.
- 3. Compliance testing and required form filing services, if applicable.
- Participant services including quarterly statements, Voice Response Unit (VRU) access, access to phone representatives, and Web access to participant account information and transactions.
- 5. Notification to the Committee of any concerns or issues with respect to such services.
- 6. In addition to the above services, the TPA is responsible for any other services listed in the Third Party Service Agreement.

Investment Managers

The specific duties and responsibilities of each Investment Manager are as follows:

- 1. To manage the Plan assets under its supervision in accordance with guidelines and objectives included in each Investment Manager's agreement, or in accordance with the prospectus for mutual funds and consistent with each Investment Manager's stated investment philosophy and style as presented to the Investment Consultant.
- 2. To exercise investment discretion in regard to buying, managing and selling assets held in the portfolio, subject to any limitations contained in this document and the Investment Manager's agreement or prospectus.

See Plan's quarterly investment monitoring report for listing of all Investment Managers.

INVESTMENT OPTION POLICIES

Selection of Investment Options

The Committee will determine, through an understanding of eligible participants, the most appropriate number and type of investment options to offer, and which specific Investment Manager to employ for each investment option. With the assistance of the Investment Consultant, the Committee has selected the asset classes and Investment Managers to represent the investment options shown in the Plan's quarterly investment monitoring report.

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The objective of this asset class is to preserve capital and to provide a reasonably predictable return that moves generally in the direction of prevailing interest rates.

Defensive/Short-Term Bond

The objective of this asset class is to limit volatility risk and loss of principal while achieving a competitive rate of return that will, over the long-term, be superior to money market returns. Funds in this asset class generally invest in a diversified portfolio of fixed income securities with an average maturity of less than 4 years.

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- 3. A conference call and/or meeting with representatives of the investment management firm to gain insights into any organizational and managerial staff changes.
- 4. A review of information gathered from the quantitative analysis and interview. The review may lead to a decision to retain the investment option in a normal capacity, retain subject to improvement over a six-month to one-year period, or terminate.

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LANSING BOARD OF WATER AND LIGHT 457 DEFERRED COMPENSATION PLAN AND TRUST

STATEMENT OF INVESTMENT POLICIES, PROCEDURES AND OBJECTIVES

Effective November 13, 2018, except as otherwise noted herein

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SUMMARY OF PURPOSE AND OBJECTIVES

Plan Purpose and Objectives

The Lansing Board of Water and Light ("BWL") is a municipal utility providing drinking water, electricity, steam and chilled water services to the greater Lansing area in mid-Michigan.

This Statement of Investment Policies, Procedures and Objectives ("Statement") is issued by the Commissioners of the Lansing Board of Water and Light (the "Commissioners") for the Lansing Board of Water and Light 457 Deferred Compensation Plan and Trust (the "Plan").

The Plan covers the eligible employees of the BWL and its related entities according to the terms of the Plan document, with the objective of offering participants the opportunity to save, manage, accumulate and preserve retirement account assets.

The Trustees of the Plan are the eight appointed voting Commissioners of the Lansing Board of Water and Light. Non-voting Commissioners are not Trustees of the Plan. The Trustees have delegated certain responsibilities that are described in this Statement to the Retirement Plan Committee (the "Committee"), effective as of the date on which this Statement is acknowledged by the Trustees. As of that date, all provisions in this Statement relating to the Committee shall become operative.

Responsibility for selecting Investment Managers, Investment Consultants, and other investment service providers required for the management of the Plan's assets and for evaluating overall investment results has been delegated to the Committee which shall report to the Trustees regarding selections made and investment performance. The Trustees must evaluate the Committee's actions in light of the Committee's responsibilities under the terms of this Statement, as updated from time to time by the Commissioners, and as communicated to the Trustees by the Commissioners in writing.

Decisions regarding investment options will be made in the sole interest of the participants and beneficiaries of the Plan. All Plan assets may be invested at the discretion of the participant, or if permitted, their beneficiary, in investment options selected from a group of alternatives made available by the Plan. The number and types of investment alternatives available and the Investment Managers retained to manage the alternatives are subject to change.

The provisions of the Statement are subject to the terms of the Plan and the agreement establishing the Trust maintained pursuant to the Plan. To the extent of any conflict between this Statement and the terms of the Plan, the terms of such Plan control. This Statement does not provide any additional rights to any party other than those that are described in those documents. Any investment advisory agreement that is entered into from time to time by the Committee must be subject to the terms of this Statement.

Purpose of the Statement

The purpose of this Statement is to assist the Committee in effectively selecting, supervising, and evaluating the investment options provided under the Plan. The primary focus of this Statement is to:

- 1. Clearly describe and distinguish among the responsibilities of the Committee, the Investment Managers, the Third Party Administrator, the Custodian, the Trustee, the Investment Consultant, and any additional service providers.
- 2. Establish formal criteria to select and monitor the investment options under the Plan; and
- 3. Facilitate communication between the Committee and all service providers.

The Commissioners retain the authority to approve, revise and update this Statement as necessary to ensure that it is consistent with BWL's investment philosophy. Any revisions or

updates made to the Statement shall be communicated to the Trustees and the Committee from time to time in writing. The Trustees shall formally acknowledge any revisions or updates by communicating the same to the Commissioners in writing. It shall be the duty of the Trustees to act strictly in accordance with the Statement, and any changes therein, as so communicated to and acknowledged by the Trustees.

ROLES AND RESPONSIBILITIES

Lansing Board of Water and Light Retirement Plan Committee

The Committee is responsible for overseeing the administration of the Plan and investment of the Plan assets. Its duties include executing this Statement, hiring investment service providers, and monitoring and evaluating the performance of service providers in carrying out this Statement.

The responsibilities of the Committee, as delegated by the Trustees, include:

- 1. Establishing, monitoring, reviewing and modifying the number and types of investment options available to Plan participants, including default options for participants who fail to make investment elections.
- 2. Conducting appropriate due diligence in the selection of all investment service providers.
- 3. Retaining investment service providers as necessary, including, but not limited to investment advisors and consultants, and investment managers.
- 4. Establishing effective communication procedures among all investment service providers and the Committee.
- 5. Monitoring the success of the investment program in meeting established objectives including appropriateness of funds offered and fund performance.
- 6. Ensuring that the Plan's investment options are appropriately communicated to participants by working with the Plan sponsor toward that goal.

Investment Consultant

The primary role of the Investment Consultant is to assist the Retirement Plan Committee in fulfilling its responsibilities by providing information, analysis and a prudent process that contribute to the success of the investment program. Specifically, the responsibilities of the Investment Consultant are as follows:

- 1. Assisting the Retirement Plan Committee in selecting investment options that provide Plan participants with the ability to construct a diversified portfolio at the appropriate risk level.
- 2. Assisting in identifying appropriate market benchmarks and peer groups for the evaluation of each investment option.
- 3. Assisting in a prudent Investment Manager search process, identifying appropriate candidates for review and selection by the Retirement Plan Committee.
- 4. Monitoring the investment management firms and investment options on an on-going basis and informing the Retirement Plan Committee of material developments.
- 5. As requested, assisting in educating the Retirement Plan Committee on investment issues that might impact the Plan.
- 6. Assisting the Retirement Plan Committee in analyzing fees and summarizing fees paid to various service providers.
- 7. Keeping abreast of and updating the Committee on the legislative environment, industry trends, and Plan design options.

8. In addition to the above services, the Investment Consultant is responsible for any other services listed in the Investment Advisory Agreement.

Custodian (Directed Trustee)

The Custodian provides the services listed below:

- 1. Adequate safekeeping services.
- 2. Accurate and timely pricing of securities.
- 3. Timely settlement of securities transactions.
- 4. Timely collection of income.
- 5. Suitable accounting services.
- 6. Appropriate data processing capabilities.
- 7. Communication with the Committee regarding any concerns or issues with respect to such services.
- 8. In addition to the above services, the Custodian is responsible for any other services listed in the Custodial Service Agreement.

Third Party Administrator (TPA)/Record Keeper

The TPA provides the services listed below.

- 1. Suitable and accurate participant record keeping and administrative services.
- 2. Accurately and timely provide Plan data and reports to the Committee upon request.
- 3. Compliance testing and required form filing services, if applicable.
- Participant services including quarterly statements, Voice Response Unit (VRU) access, access to phone representatives, and Web access to participant account information and transactions.
- 5. Notification to the Committee of any concerns or issues with respect to such services.
- 6. In addition to the above services, the TPA is responsible for any other services listed in the Third Party Service Agreement.

Investment Managers

The specific duties and responsibilities of each Investment Manager are as follows:

- 1. To manage the Plan assets under its supervision in accordance with guidelines and objectives included in each Investment Manager's agreement, or in accordance with the prospectus for mutual funds and consistent with each Investment Manager's stated investment philosophy and style as presented to the Investment Consultant.
- 2. To exercise investment discretion in regard to buying, managing and selling assets held in the portfolio, subject to any limitations contained in this document and the Investment Manager's agreement or prospectus.

See Plan's quarterly investment monitoring report for listing of all Investment Managers.

INVESTMENT OPTION POLICIES

Selection of Investment Options

The Committee will determine, through an understanding of eligible participants, the most appropriate number and type of investment options to offer, and which specific Investment Manager to employ for each investment option. With the assistance of the Investment Consultant, the Committee has selected the asset classes and Investment Managers to represent the investment options shown in the Plan's quarterly investment monitoring report.

Default Investment

The discretionary assets of participants who do not make an active selection among the available options will be placed in the Plan's default fund(s). Defaulted assets will be placed into the appropriate target date fund based on the age and assumed time to retirement of the participant.

Description of Investment Options

In order to provide appropriate investment alternatives for participants, a diversified menu of investment options is to be made available under the Plan. The specific investment options available under the Plan are identified in the Plan's quarterly investment monitoring report. Below is a description of the asset classes that may be offered in the Plan:

Money Market

Investments in short term, high-quality securities with very limited principal risk (or risk commensurate with other money market funds). The interest rate for investments in this asset class will be a function of short-term rates for assets held.

Stable Income

The objective of this asset class is to preserve capital and to provide a reasonably predictable return that moves generally in the direction of prevailing interest rates.

Defensive/Short-Term Bond

The objective of this asset class is to limit volatility risk and loss of principal while achieving a competitive rate of return that will, over the long-term, be superior to money market returns. Funds in this asset class generally invest in a diversified portfolio of fixed income securities with an average maturity of less than 4 years.

Broad/Intermediate-Term Bond

The objective of this asset class is to provide a bond alternative that will have more interest rate risk and, hopefully, provide more return than defensive fixed income or money market options. Options in this asset class will generally invest in a diversified portfolio of fixed income securities with an average maturity of greater than four years (not to exceed 15 years) or inflation protected securities.

High Yield Bond

The objective of this asset class is to provide a bond alternative that will invest primarily in lower quality issues that offer higher yields than investment grade bonds. It is understood that there will also be an increased level of credit risk and volatility within this asset class when compared to higher quality bond asset classes. The average credit quality of options in this asset class should be below BBB and the average maturity should be less than 15 years.

International Bond

The objective of this asset class is to provide a bond alternative that will invest primarily in non-U.S. issuers. Options in this asset class should be diversified by geographic region and by individual issue. They may be denominated in U.S. dollars. The average maturity of options in this asset class should be less than 15 years.

Multi-Sector Bond

The objective of this asset class is to provide a bond alternative that will invest in a diversified portfolio of fixed income securities that may include both credit and government oriented issues, as well as U.S.- based issuers and non-U.S. issuers.

Balanced/Asset Allocation

The objective of this asset class is to provide varying levels of exposure in domestic and foreign common stocks and fixed-income securities.

Target Date Investment

The objective of this asset class is to provide options that vary in risk and return based on a target retirement date. The option is designed to provide those participants that want to make an investment decision based on their target retirement date the ability to do so. The portfolios will be reallocated with greater emphasis on more conservative investments as the participant nears the stated retirement date.

Domestic Stock

The objective of this asset class is to provide an alternative that has investment performance that is highly correlated to the U.S. stock markets. These investment options can be designed to utilize the expertise of a manager that can attempt to add value to overall U.S. stock market returns or designed as an index option that attempts to match the performance of an index. The Plan may utilize options with different investment styles (growth, value or index) and market capitalizations (large, medium, and small) to pursue returns equal to or greater than the broad markets. Risk is acceptable given the commitment to equity securities; however, risk (as measured by standard deviation) beyond the comparative broad market should be taken only if the reasonably anticipated incremental return justifies it over an appropriate comparable time frame. The median market capitalization of a fund within this category should be representative of a particular asset class (e.g., small company). Funds that invest in certain sectors of the market (e.g., REITS, healthcare, utilities, technology, etc.) are allowed as investment options under the Plan, but should be diversified in the number of securities owned. Before adding sector funds as investment options under the Plan, careful consideration should be given to the diversity of the existing investment options and the sophistication level of the Plan participants, as all participants would be allowed to invest in such a fund.

Developed International Stock

The objective of this asset class is to provide an option that generally invests in a diversified portfolio of non-U.S. companies in developed markets that are primarily denominated in foreign currencies. Risk is acceptable given the commitment to non-U.S. equity securities; however, risk (as measured by standard deviation) beyond the comparative broad market should be taken only if the reasonably anticipated incremental return justifies it over an appropriate comparable time frame.

Emerging Markets International

The objective of this asset class is to provide an option that invests in a diversified portfolio of non-U.S. companies, in emerging markets, that are primarily denominated in foreign currencies. Risk is acceptable given the commitment to equity securities of emerging countries; however, risk (as measured by standard deviation) beyond the comparative broad market should be taken only if the reasonably anticipated incremental return justifies it over an appropriate comparable time frame.

Commodity

The objective of this asset class is to provide an option that invests primarily in commodities either directly or through future contracts of commodities. Investing in commodities is offered to provide an asset that has generally lower correlation with the broad stock and bond markets, and to potentially provide a hedge against increased inflation. Risk is acceptable given the commitment to commodities; however, risk (as measured by standard deviation) beyond the comparative broad commodity index should be taken only if the reasonably anticipated incremental return justifies it over an appropriate comparable time frame.

Real Asset

The objective of this asset class is to achieve positive long-term real returns, provide inflation protection by investing in a broadly diversified basket of assets with inflation-sensitive characteristics, and enhance portfolio diversification. Options in this asset class typically invest in a variety of asset classes that include, but may not be limited to, the following: inflation-indexed bonds (TIPS), floating rate debt, real estate investment trusts (REITs), commodity index-linked instruments, natural resource equities, master limited partnerships (MLPs), and publicly-listed infrastructure equities.

Self-Directed Brokerage Account

Self-Directed Brokerage Accounts (SDBA) allow participants to invest all or a portion of their Plan account balance into investment options available through the brokerage service. Some of the investment options that may be available to participants through the SDBA include stocks, bonds and mutual funds. Investment options within the SDBA are not monitored by BWL, the Committee, or the Investment Consultant. The Investment Consultant is not compensated on assets held within the SDBA.

PERFORMANCE OBJECTIVES

Time Horizon

The Committee acknowledges that securities markets are characterized by fluctuating rates of return, particularly during short-term time periods. Accordingly, the Committee focuses on time horizons of three years and greater (e.g. a full market cycle) in evaluating the asset class and investment option performance relative to established benchmarks.

Performance Objectives

Based on the analysis that led to asset allocation and investment option decisions, the Committee has identified performance benchmarks for each investment option and the separate mandates within multiple manager options. The relevant benchmarks for specific investment options are listed in the Plan's guarterly investment monitoring report.

The Plan's investment options will be selected to:

- 1. Seek to maximize return within reasonable and prudent levels of risk.
- 2. Provide investment returns comparable to returns for investment options having similar investment objectives and risk profiles.
- 3. Provide a diverse portfolio of investment options covering a broad range of asset classes.
- 4. Control administrative and management costs.

INVESTMENT OPTION SELECTION AND EVALUATION

Investment Option Selection

The Plan is subject to the Internal Revenue Code and Michigan Public Act 314 of 1965, as amended. Therefore, the Committee's intent is to follow a process that embodies the principles of procedural due diligence. Accordingly, when selecting investment options, the Committee, with the assistance of the Investment Consultant, will employ a competitive search process, which includes the following steps:

- 1. Identification of qualified candidates from Investment Manager search databases used by the Investment Consultant.
- 2. Analysis of qualified candidates in terms of:
 - Quantitative characteristics, such as GIPS-compliant composite return data, risk-adjusted rates of return and relevant portfolio characteristics.
 - Qualitative characteristics, such as key personnel, investment philosophy, investment strategy, research orientation, decision-making process, and risk controls.
 - Organizational factors, such as type and size of firm, ownership structure, client-servicing capabilities, client growth and retention, and fees.
- 3. Selection of finalist candidates based on a due diligence process. Investment options should meet the following minimum criteria:
 - Investment options should correspond to the asset classes outlined in this Statement. For example, the domestic stock component of this Statement could be implemented with a stock mutual fund invested primarily in domestic stocks.
 - An Investment Manager should have been acting in a portfolio manager capacity for three years or more, or must have a long term track record managing assets with a similar style at another mutual fund or investment management firm.
 - The same investment strategy should have been followed by the fund for at least three consecutive years (or, where applicable, the Investment Manager should have followed the same investment strategy for at least three consecutive years with regard to whatever fund(s) he or she managed during that three consecutive year period).
 - Each investment option should have total net assets exceeding \$300 million.
 - Each investment option should have a net expense ratio that is lower than the median (50th percentile) of their peer group unless above median expenses are justified by superior risk adjusted performance.

Performance Evaluation and Review

With the assistance of the Investment Consultant, the Committee will regularly evaluate the performance of each investment option. In evaluating each investment option, the Committee will consider qualitative factors likely to impact the future performance of the investment option in addition to current and historical rates of return.

The Committee has deemed it appropriate to establish objective standards for initiating a formal review of an Investment Manager. Any of the following three conditions may be considered cause to initiate a formal review:

- 1. *Organizational Disruption.* Examples of material organizational events that will be evaluated prior to a termination decision include:
 - Ownership changes (e.g., key people "cash out")
 - Key people leave firm
 - Manager changes within the strategy
 - Investment management firm is involved in material litigation
 - Material client-servicing problems
- 2. Long-term underperformance (defined as five years) in relation to an appropriate broad market index, the median of an appropriate peer group, and risk. If an investment option fails to generate a return premium, net of fees, in excess of the designated index or indices, performs below the median (50th percentile) of its peer group, and/or has below average alpha (compared to its peer group), then, upon completion of appropriate due diligence, the Committee may decide to eliminate that investment option under the Plan.
- 3. Shorter-term performance in relation to appropriate style index and the median of an appropriate peer group. A due diligence review process, which may lead to termination, will be initiated if an investment option ranks in the 4th guartile over a one-year period.

A review process may include the following steps:

- 1. Communication with the Investment Manager and/or a representative from the investment management firm stating the reasons for the review, the steps of the review and the possible results (retain or terminate).
- 2. A quantitative analysis of the portfolio during the period of underperformance. The analysis will focus on attribution of returns and evaluation of characteristics of the portfolio relative to the investment option's stated style and relative to the characteristics of portfolios that performed well during the period in question.
- 3. A conference call and/or meeting with representatives of the investment management firm to gain insights into any organizational and managerial staff changes.
- 4. A review of information gathered from the quantitative analysis and interview. The review may lead to a decision to retain the investment option in a normal capacity, retain subject to improvement over a six-month to one-year period, or terminate.

The Committee reserves the right to remove any investment option at its discretion. However, the decision to retain or remove an investment option cannot be made by a formula. It is a judgment that is dependent on the Committee's confidence in future performance.

REVENUE SHARING POLICIES

The Retirement Plan Committee, with the assistance of the Investment Consultant, will analyze disclosed total fees, including revenue sharing and all other disclosed forms of compensation, on an annual basis to determine reasonableness of aggregate fees for services provided. Related ongoing legal developments will be considered.

RESOLUTION

ACCEPTANCE OF 2019 AUDITED FINANCIAL STATEMENTS FOR DEFINED BENEFIT PENSION PLAN, DEFINED CONTRIBUTION PENSION PLAN, AND RETIREE BENEFIT PLAN

Resolved, that the Corporate Secretary receive and place on file the Defined Benefit, Defined Contribution, and Retiree Benefit Plan reports presented during the Pension Trustee Meeting.

<u>Staff comments</u>: All three Plans received clean audit reports.