

Illinois Municipal Retirement Fund

Senate Committee on Pensions and Investments

Brian Collins, *IMRF Executive Director*

Dhvani Shah, *IMRF Chief Investment Officer*

Rosa Vasquez, *IMRF Investment Officer- Emerging Manager Program and Total Portfolio*

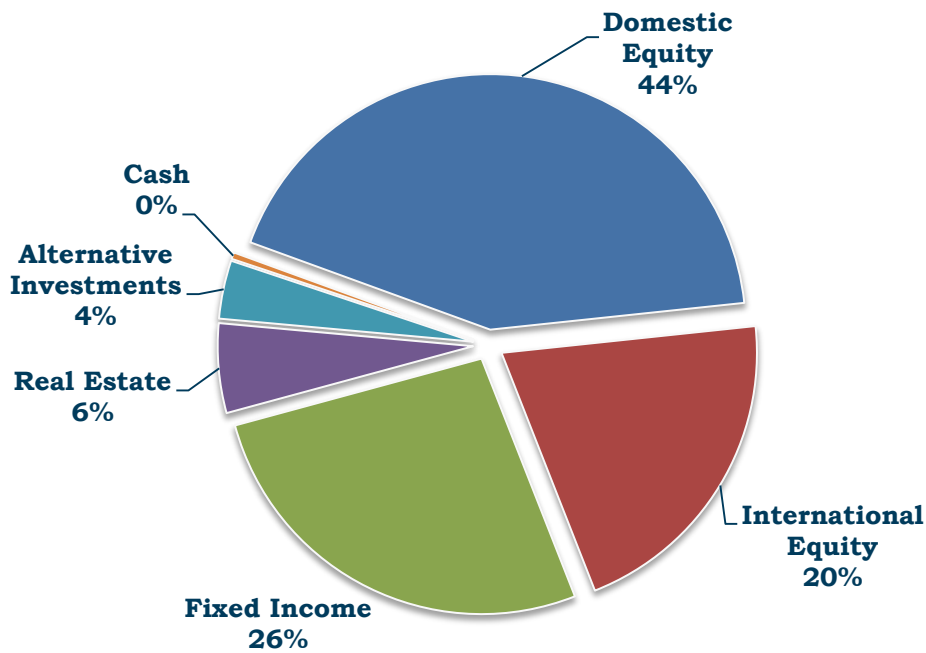
October 16th & 17th, 2018



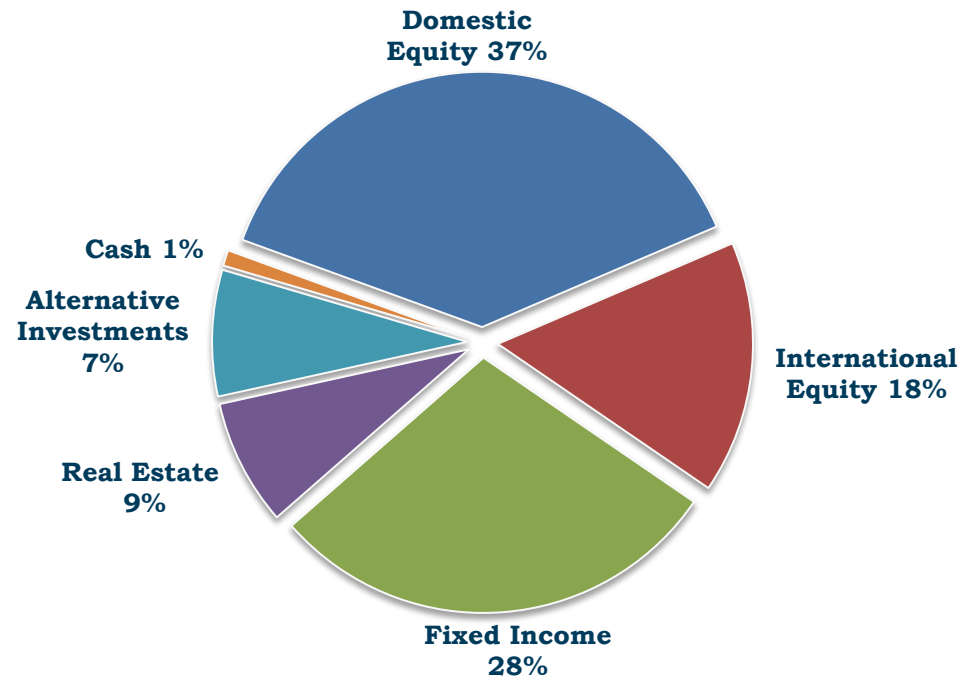
How is the money invested?

As of June 30, 2018, IMRF's total market value was \$41.2 billion

Actual Asset Allocation



Target Asset Allocation



How is the money invested?

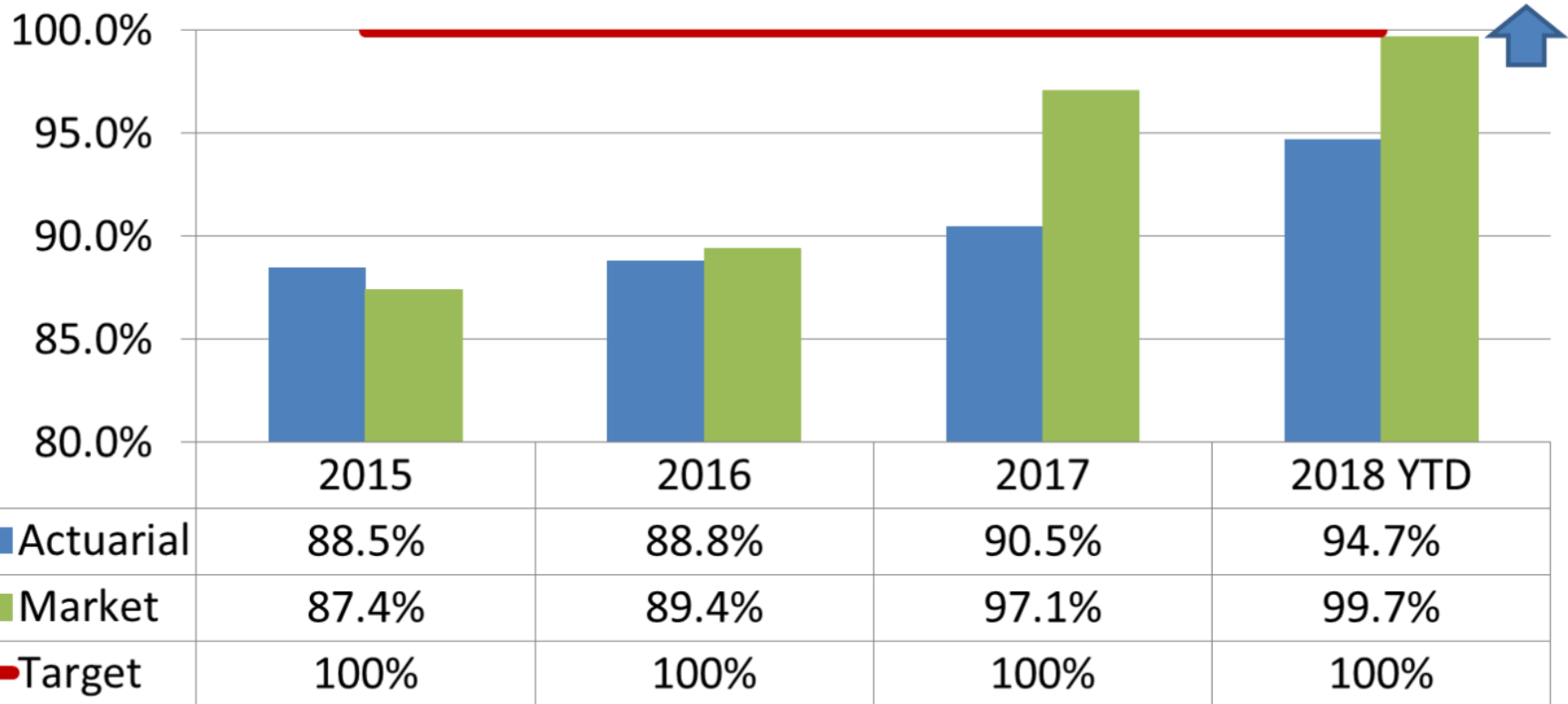
As of June 30, 2018, IMRF's total market value was \$41.2 billion

Asset Class	\$ Millions Actual	Percent Actual	Percent Target	Percent Difference	\$Millions Difference
Domestic Equity	\$18,085	43.8%	37.00%	6.8%	2,808.7
International Equity	8,148	19.7%	18.00%	1.7%	716.1
Fixed Income	10,883	26.4%	28.00%	(1.6%)	(677.0)
Real Estate ¹	2,376	5.8%	9.00%	(3.2%)	(1,339.3)
Alternative Investments ²	1,625	3.9%	7.00%	(3.1%)	(1,265.4)
Cash	170	0.4%	1.00%	(0.6%)	(243.0)
Total	\$41,287	100.0%	100.0%		

¹ Including \$1,375.8 million in unfunded commitments, Real Estate represents 9.09% as of 06/30/2018.

² Including \$1,189.8 million in unfunded commitments, Alternatives represents 6.82% as of 06/30/2018.

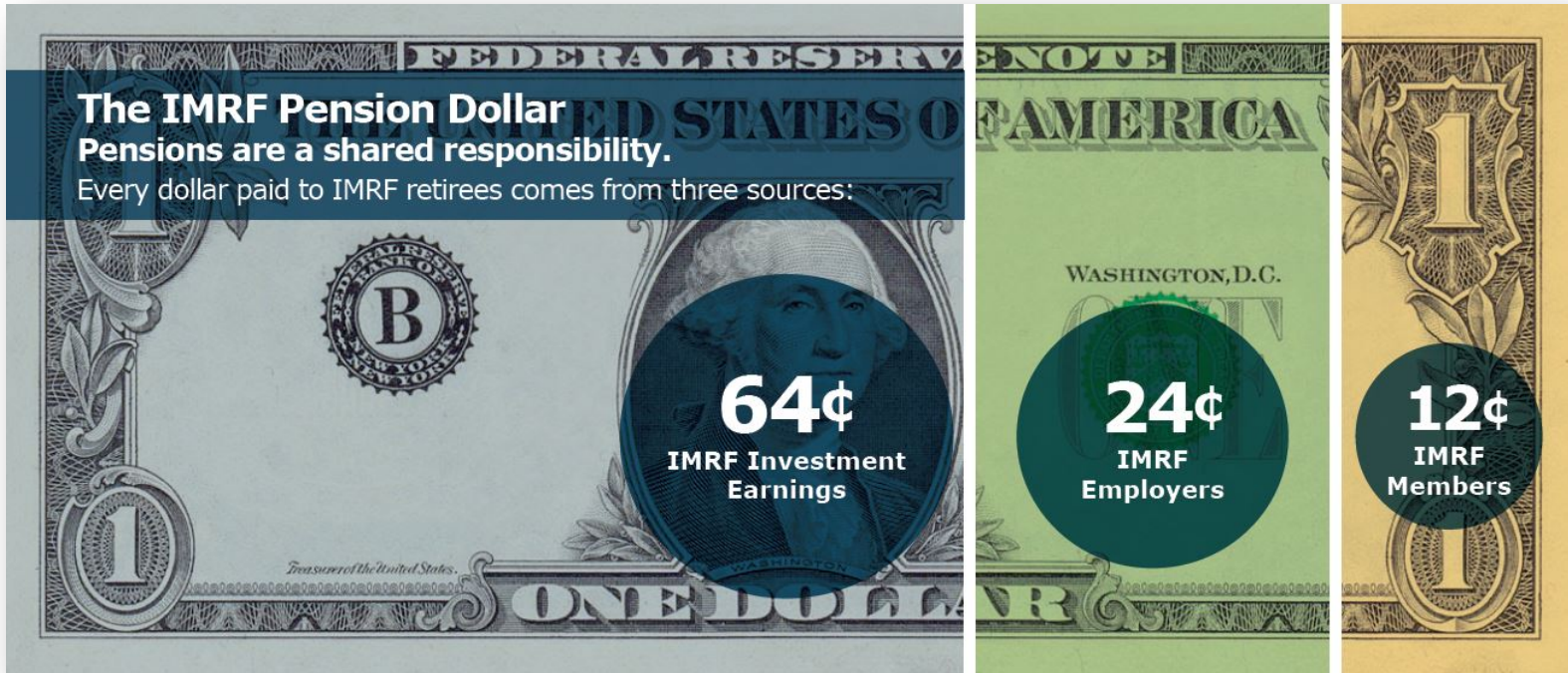
Progress Towards 100% Funding



	2011	2012	2013	2014	2015	2016	2017	YTD-August 2018
Contributions	\$1,128	\$1,216	\$1,279	\$1,251	\$1,321	\$1,307	\$1,307	\$875
Benefit and Admin. Expenditures	\$1,352	\$1,461	\$1,586	\$1,595	\$1,849	\$1,983	\$2,138	\$1,538
Net Cash Outflow	-\$224	-\$245	-\$307	-\$344	-\$528	-\$676	-\$831	-\$663

in millions

Where does the money come from?



How does IMRF help Illinois economy?

- **\$16.2 billion of IMRF's assets are managed by Illinois-based Investment Management firms.**
- **\$850 million of IMRF's assets are managed by Illinois-based Investment Management firms owned by minorities, women and persons with a disability.**
 - **\$7.5 billion of IMRF's assets are managed by minorities, women and persons with a disability.**
- **Retirees spend their money in Illinois**
 - 86% of retired members remain in Illinois
 - In 2017, IMRF paid \$1.7 billion to Illinois retirees
 - Payments generated \$2.51 billion in economic activity*
 - Supported creation of 18,044 jobs

**IMRF benefit payments times the U.S. Bureau of Economic Analysis Total Output Multiplier*

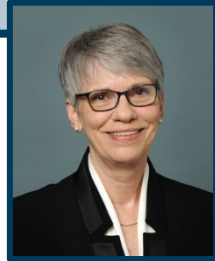
OUR BOARD OF TRUSTEES

3 ELECTED BY MEMBERS



Natalie Copper

School-age Child Care
Site-coordinator
Dawes School in Evanston
IMRF Board President



Trudy Williams

Administrative Assistant
Fulton County State's
Attorney's Office



Alex Wallace, Jr.

Bus Driver
Oswego Community
Unit School District 308
IMRF Secretary

1 ELECTED BY RETIRED MEMBERS



Sharon U. Thompson

Treasurer (Formerly)
Lee County

• 4 ELECTED BY EMPLOYERS



Sue Stanish

Director of
Finance
Naperville Park
District



Tom Kuehne

Finance Director/Treasurer
Village of Arlington
Heights



David Miller

Deputy Executive
Director
North Shore Water
Reclamation District
IMRF Vice President



Gwen Henry

Treasurer
DuPage County

IMRF Investments Team

The IMRF Investments Team has **12** investment professionals and **2** administrative support staff:

- In aggregate, seven males and seven women make up the Investments Department
- Investment Department Diversity:
 - IMRF's Chief Investment Officer is an Asian American Woman
 - Three of IMRF's four Investment Officers are Women
 - Two of the these Investment Officers are Latina
 - Two of IMRF's Investment Analysts are Latino/Latina

*An African American Investment Analyst left IMRF to pursue full-time MBA at University of Chicago Booth School of Business and was replaced by a Latino.

Minority Investment Managers

As of June 30, 2018

IMRF's Minority Investment Managers invest over \$7.5 billion in active strategies across domestic equity, international equity, fixed income, private equity and real estate asset classes.

Asset Class	Minority \$ AUM	Asset Class \$ AUM	Minimum Goal as a % of Each Asset Class	Minority % of Asset Class	Minority % of Total Fund Market Value	Minority % of Active Strategies
Domestic Equity	\$0.375 billion	\$18.085 billion	8%	2.1%	0.9%	1.3%
Fixed Income	3.931 billion	10.883 billion	25%	36.1%	9.5%	13.8%
International Equity	1.964 billion	8.148 billion	15%	24.1%	4.8%	6.9%
Private Equity*	0.8 billion	2.929 billion	10%	27.3%	1.9%	2.8%
Real Estate*	0.517 billion	3.901 billion	4%	13.3%	1.3%	1.8%
Total	\$ 7.587 billion				18.4%	26.7%

**Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Data as of 06/30/18. Total Fund Market Value equals \$41,286,537,444. Total Active Strategies equal \$28,461,312,003.*

Based on estimated data as of September 2018, \$8.6 billion or 21.0% of IMRF's assets are managed by Minority, Women and Disabled owned firms.

IMRF's Assets Managed by Minority Managers (in millions)



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	6/2018	9/2018
IMRF \$ AUM	13,876	16,843	18,496	20,129	23,002	24,707	18,412	22,347	25,546	24,831	27,887	33,126	34,588	34,270	36,274	41,095	41,287	41,287
Minority % of IMRF AUM	12.5%	13.5%	9.4%	11.3%	12.3%	12.6%	11.7%	13.3%	14.0%	18.4%	19.0%	18.0%	18.0%	19.2%	19.4%	18.4%	18.4%	21.0%

Data as of 06/30/18. 09/2018 data is an estimate.

Fund of Funds/Manager of Managers values are reported at the underlying manager level. Data is unaudited.

Private Equity and Real Estate percentages are calculated using committed amounts

Latino American Investment Managers

As of June 30, 2018

IMRF's Latino American Investment Managers manage over \$2.4 billion across domestic equity, international equity, fixed income, private equity and real estate asset classes.

Latino	\$ AUM	Asset Class \$ AUM	% of Asset Class
Domestic Equity	\$136,414,512	\$18,084,681,730	0.75%
Fixed Income	1,871,791,149	10,883,255,040	17.20%
International Equity	67,350,457	8,147,637,609	0.83%
Private Equity*	214,782,082	2,928,842,412	7.33%
Real Estate*	200,401,220	3,900,986,460	5.14%
Total	\$2,490,739,419		

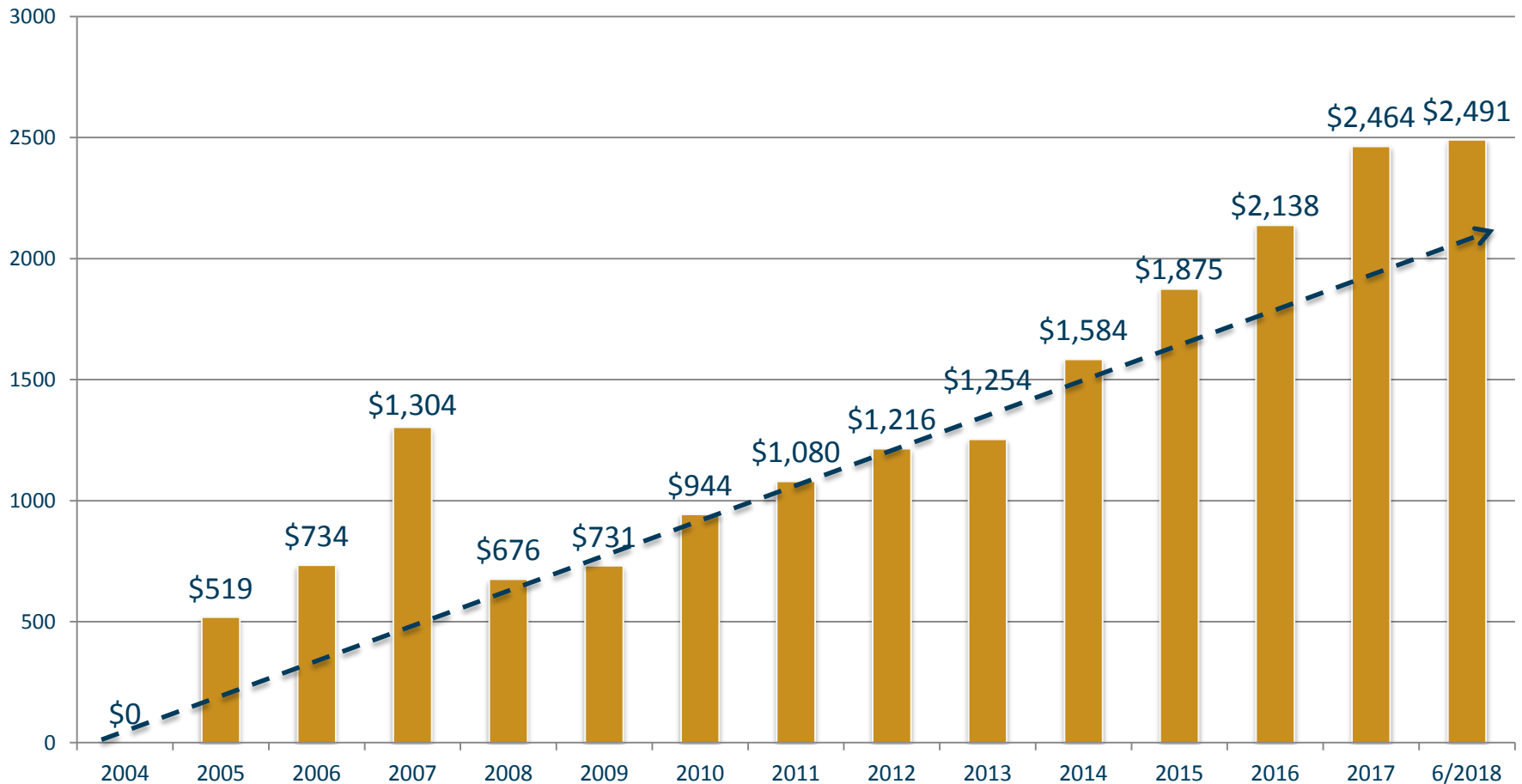
**Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Data as of 06/30/18.*

Latino American Investment Managers

History of Latino American Owned Investment Managers

December 31, 2004 through June 30, 2018

Assets under management have increased by more than \$2.0 billion since 2004



African American Investment Managers

As of June 30, 2018

IMRF's African American Investment Managers manage over \$3.6 billion across domestic equity, international equity, fixed income, real estate, and private equity asset classes.

African American	\$ AUM	Asset Class \$ AUM	% of Asset Class
Domestic Equity	\$238,176,304	\$18,084,681,730	1.3%
Fixed Income	1,739,865,959	10,883,255,040	16.0%
International Equity	1,063,749,780	8,147,637,609	13.1%
Private Equity*	513,588,452	2,928,842,412	17.5%
Real Estate*	63,000,000	3,900,986,460	1.6%
Total (As of June 2018)	\$3,618,380,494		
Total (Sept. 2018 Estimate)	\$4,718,380,494		

*Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Data as of 06/30/18.

IMRF closed on \$100 million commitment to Vista Equity Partners VII in August 2018.

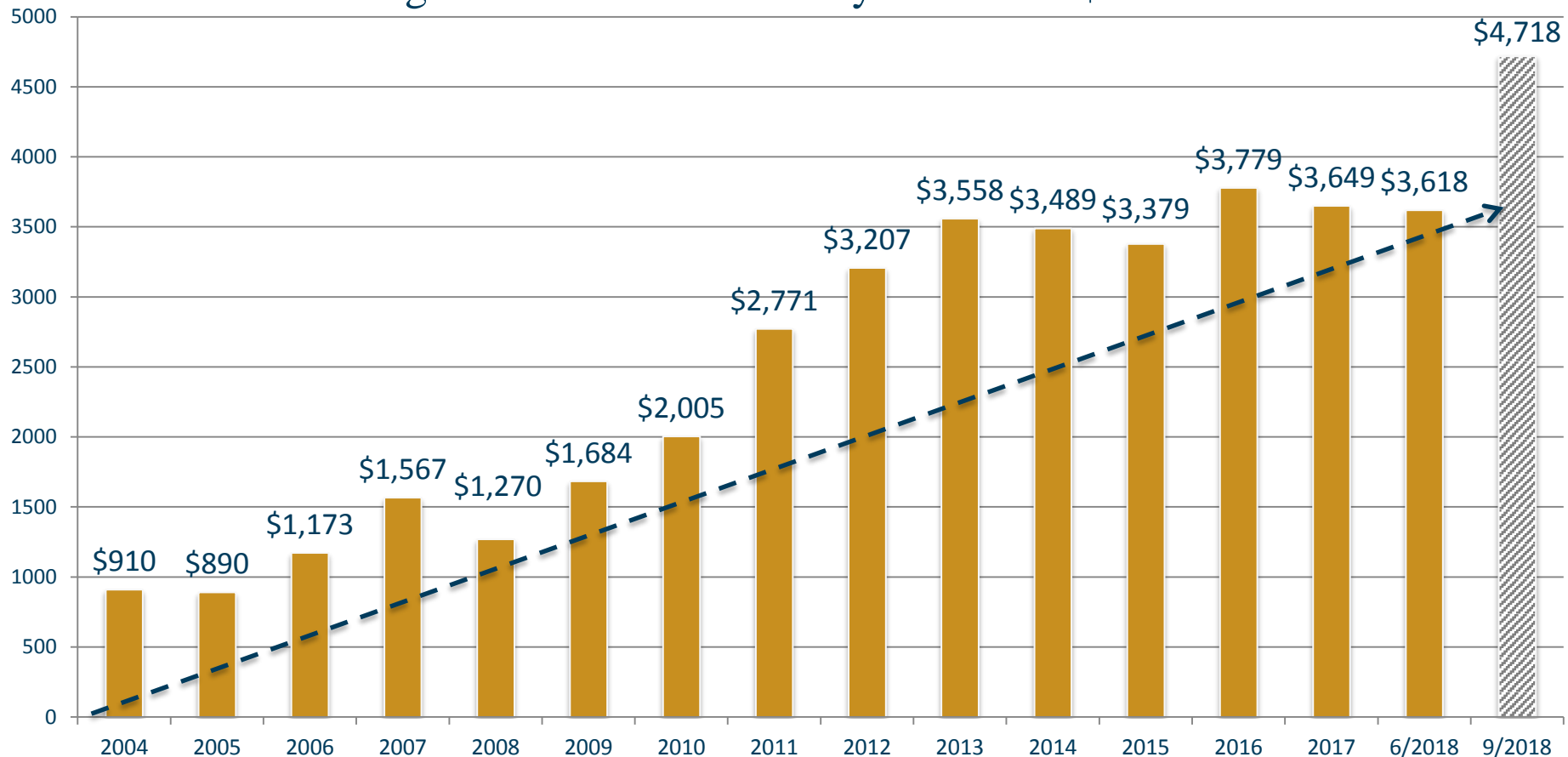
IMRF funded \$1 billion to Piedmont Russell 1000 Growth Index in September 2018.

African American Investment Managers

History of African American Owned Investment Managers

December 31, 2004 through September 30, 2018

Assets under management have increased by more than \$3 billion since 2004



Data as of 06/30/18
09/2018 is an Estimate

Minority Investment Manager Policy

The Illinois Municipal Retirement Fund is committed to providing opportunities for minority and women owned investment management firms and investment management firms owned by a person with a disability. IMRF has adopted the aspirational goal that 20% of the total Fund assets be managed by firms owned by minorities, women and persons with a disability.

Investment Manager Classification	Minimum Goal as a % of the Total IMRF Portfolio	Actual % of Total Fund Market Value As of 6/30/18	Assets Under Management as of 06/30/18
Minority Owned Businesses	13%	15.09%	\$6,229.3
Women Owned Businesses	6%	3.25%	1,342.3
Businesses Owned by a Person with a Disability	1%	0.04%	14.8
Total Minority, Women and Disabled Owned Investment Management Firms	20%	18.38%	\$7,586.5

Based on estimated data as of September 2018, \$8.6 billion or 21.0% of IMRF's assets are managed by Minority, Women and Disabled owned firms.

Minority Investment Manager Policy

The Illinois Municipal Retirement Fund is committed to providing opportunities for minority and women owned investment management firms and investment management firms owned by a person with a disability.

Asset Class	Minimum Goal as a % of Each Asset Class	As of 06/30/2018 Actual % of Asset Class
Domestic Equity	8%	2.1%***
International Equity	15%	24.1%
Fixed Income	20%	36.1%
Real Estate*	4%	13.3%
Private Equity*	10%	27.3%
Timberland**	Best Efforts	0.0%
Agriculture**	Best Efforts	0.0%

**Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Data as of 06/30/2018.. ** Timberland and Agriculture, in aggregate, represent less than 1.0% of the total IMRF portfolio.*

****Based on estimated September 2018 data, 7.2% of Domestic Equity will be managed by MWBE firms.*

Minority Brokerage Policy – Public Equity

The Illinois Municipal Retirement Fund is committed to providing opportunities for minority owned and women owned broker/dealers and broker/dealers owned by a person with a disability. The below information is year to date through June 30, 2018 for the Public Equity asset class.

Asset Class	YTD Commissions	YTD Minority Commissions	Minimum Goal	Actual Minority Brokerage Percentage
U.S. Equities	\$1,025,509	\$357,252	25.0%	34.8%
U.S. Large-Cap Equities	\$604,225	\$287,416	30.0%	47.6%
International Equities	\$1,730,705	\$590,600	20.0%	34.1%
International Small-Cap Equities	\$376,336	\$74,685	5.0%	19.8%
Global Listed Infrastructure	\$2,035,884	\$457,545	20.0%	22.5%
U.S. Micro-Cap Equities	\$406,719	\$134,812	10.0%	33.1%
Equity Commingled Accounts	\$784,362	\$10,075	Best Efforts	1.3%
Emerging Market Equities	N/A	N/A	5.0%	0.0%

The goal for Commingled Funds/Passive Index strategies is Best Efforts. IMRF has made significant progress working with its investment managers and expects to have a formal goal for passive commingled funds in 2019.

Public Equity Commissions Paid to Minority Broker/Dealers

IMRF's Investment Managers executed trades with Minority brokers generating over \$1.9 million in commissions across the Public Equity asset class.

Classification	Commissions Paid	% of Total Commissions Paid (YTD 6/30/18)
African American	\$537,976	7.7%
Disabled	479,450	6.9%
Latino	320,547	4.6%
Women	574,410	8.2%
Total Minority	\$1,912,383	27.46%

Total commissions paid is \$6,963,740

Minority Brokerage Policy - Fixed Income

The Illinois Municipal Retirement Fund is committed to providing opportunities for minority owned and women owned broker/dealers and broker/dealers owned by a person with a disability. The below information is year to date through June 30, 2018 for the Fixed Income asset class.

Asset Class	YTD Par Volume Traded	YTD Minority Par Volume Traded	Minimum Goal	Actual Minority Brokerage Percentage
Fixed Income	4,850,066,053	1,892,683,049	22.0%	39.0%
High Yield Bonds	155,401,428	11,798,000	5.0%	7.6%
Emerging Market Debt	768,794,833	0	Best Efforts	0.0%
Fixed Income Commingled Accounts	35,663,266,223	28,102,052	Best Efforts	0.1%
Opportunistic Strategies	N/A	N/A	Best Efforts	0.0%
Bank Loans	N/A	N/A	Best Efforts	0.0%

The goal for Commingled Funds/Passive Index strategies is Best Efforts. IMRF has made significant progress working with its investment managers and expects to have a formal goal for passive commingled funds in 2019.

Minority Brokerage - Fixed Income and High Yield

Minority Brokers traded 1.9 billion par across the Fixed Income and High Yield separately managed accounts.

Asset Class	YTD Par Volume Traded	YTD Minority Par Volume Traded	Minimum Goal	Actual Minority Brokerage Percentage
Fixed Income	4,850,066,053	1,892,683,049	22.0%	39.0%
High-Yield Bonds	155,401,428	11,798,000	5.0%	7.6%
	5,005,467,481	1,904,481,049		

The above information for Fixed Income and High Yield SMAs is year to date through June 30, 2018.

Fixed Income and High Yield Par Volume Traded by Minority Broker/Dealers

Fixed Income

Classification	Par Volume Traded	% of Total Par Volume Traded (YTD 6/30/18)
African American	1,134,410,372	23.4%
Disabled	266,725,183	5.5%
Latino	418,602,493	8.6%
Women	72,945,000	1.5%
Total Minority	1,892,683,048	39.0%

High Yield

Classification	Par Volume Traded	% of Total Par Volume Traded (YTD 6/30/18)
African American	1,380,000	0.9%
Disabled	5,065,000	3.3%
Latino	4,478,000	2.9%
Women	875,000	0.6%
Total Minority	11,798,000	7.6%

IMRF's Commitment to Diversity and Inclusion

- Support the Emerging Investment Manager Community
 - IMRF's Chief Investment Officer serves on the Board of Directors of CFA Society Chicago, The Robert Toigo Foundation, PREA Foundation, and is a member of SEO LPAC
 - IMRF's Investment Officer participates on a ILPA working group focused on diversity and inclusion for Private Equity
- Amended IMRF's Statement of Investment Policy to:
 - direct Staff to attend emerging manager conferences and events
 - allow the prospect of passive mandates with emerging managers
 - increase goals for real estate and private equity
 - comply with Consultant bill

IMRF's Open Door Policy

- IMRF has an open door policy for meeting with investment managers and broker/dealers
- Investment managers and broker/dealers do not need any third party referral
- IMRF has a dedicated team that focuses on meeting with firms owned by minorities, women and persons with a disability
- In 2017, IMRF staff held 326 meetings with prospective managers. 98 meetings were with firms owned by minorities, women and persons with a disability
- As of August 2018, IMRF staff held 166 meetings with prospective managers year to date. 34 meetings were with firms owned by minorities, women and persons with a disability

Illinois-based Investment Managers

As of June 30, 2018

IMRF's Illinois-based Investment Managers invest over \$16.2 billion across domestic equity, international equity, fixed income, private equity and real estate asset classes.

Asset Class	IL \$ AUM	Asset Class \$ AUM	IL % of Asset Class
Domestic Equity	\$10,724,795,040	\$18,084,681,730	59.3%
Fixed Income	1,636,012,598	10,883,255,040	15.0%
International Equity	3,309,549,885	8,147,637,609	40.6%
Private Equity*	355,719,125	1,359,094,742	26.2%
Real Estate*	234,849,944	2,376,447,436	9.9%
Total	\$16,260,926,591		

**Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Data as of 06/30/18.*

Appendix

Minority and Emerging Assets Under Management (in millions)

Investment Manager Classification	Minority Managers	Emerging Managers ¹
Minority Owned Businesses	\$6,229	\$3,139
Women Owned Businesses	1,342	1,342
Businesses Owned by a Person with a Disability	15	15
Total Assets Under Management (As of June 2018)	\$7,587	\$4,496
Total Assets Under Management (Sept. 2018 Estimate)	\$8,687	\$4,496

¹ IMRF has 6 Minority managers that are not considered Emerging managers, Brown Capital, Earnest Partners, Garcia Hamilton, Longfellow, Piedmont and Vista. These firms have assets under management greater than \$10 billion dollars. In aggregate, they manage \$4.1 billion for IMRF.

Total Fund Market Value equals \$41,286,537,444. Total Active Strategies equal \$28,461,312,003.
Data as of 06/30/18. Numbers may not add up due to rounding.

Minority Manager Allocations

Year to date through September 2018, \$1,240 million or 70% of all new capital allocations were directed to Minority Managers.

- Private Equity \$165 million
- Domestic Equity \$1 billion
- Real Estate \$75

In 2017, \$905 million or 34% of all new capital allocations were directed to Minority Managers.

- Private Equity \$155 million
- Fixed Income \$600 million
- Real Estate \$150 million

In 2016, \$725 million or 48% of all new capital allocations were directed to Minority Managers.

- Private Equity \$270 million
- Fixed Income \$275 million
- Real Estate \$130 million
- Domestic Equity \$50

In 2015, \$560 million or 23% of all new capital allocations were directed to Minority Managers.

- Private Equity \$10 million
- Fixed Income \$450 million
- Real Estate \$100 million

Minority Manager Allocations

In 2014, \$125 million or 8.5% of all new capital allocations were directed to Minority Managers.

- Private Equity \$125 million

In 2013, \$215 million or 22.1% of all new capital allocations were directed to Minority Managers.

- Private Equity \$65 million
- Domestic Equity \$150

In 2012, \$20 million or 5.5% of all new capital allocations were directed to Minority Managers.

- Private Equity \$20 million

Investment Management Fees

In 2017, IMRF paid over \$27 million in investment management fees to Minority owned managers.

Classification	Minority \$ Fees Paid	Minority % of Fees Paid	% of Total Fees
African American	\$16,319,632	58.6%	13.2%
Latino	5,732,993	20.6%	4.6%
Asian	773,055	2.8%	0.6%
Women	4,905,861	17.6%	4.0%
Disabled	126,807	0.5%	0.1%
Total	\$27,858,348		22.6%

Asset Class	Total Minority Fees Paid in Asset Class	Total Fees Paid in Asset Class	Minority % of AUM in Asset Class	Minority % of Fees Paid in Asset Class
Domestic Equity	\$3,407,483	\$32,168,007	2.05%	10.6%
Fixed Income	6,860,079	15,645,242	36.05%	43.8%
International Equity	7,587,633	25,631,155	23.89%	29.6%
Alternatives	7,573,173	24,258,502	29.68%	31.2%
Real Estate	2,429,981	25,746,029	12.23%	9.4%
Total	\$27,858,348	\$123,448,935		22.6%

Manager of Managers/Fund of Funds Fees

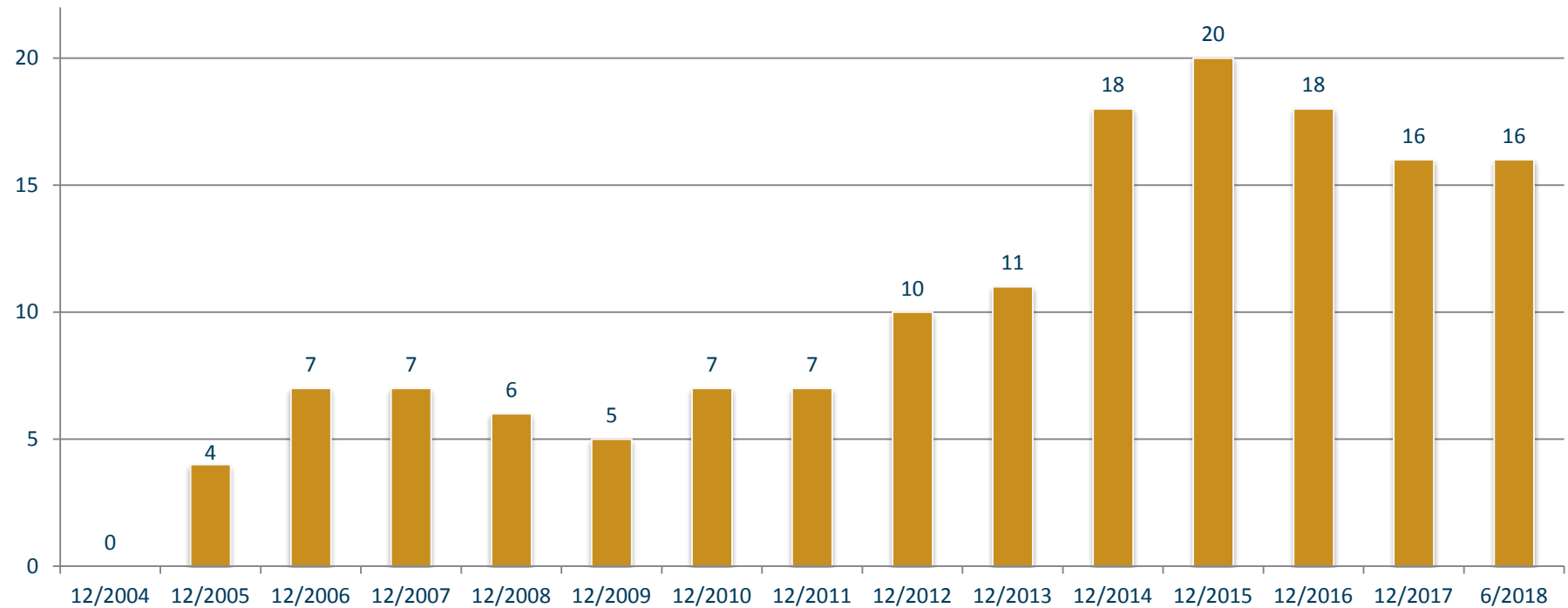
as of 12/31/17

- IMRF utilizes four Manager of Managers/Fund of Funds for International Equity, Fixed Income and Real Estate dedicated to hiring underlying MWBE firms.
- The fee split between Progress Investment Management and the underlying managers for the Fixed Income Manager of Managers mandate is 37.38% or \$1.077 million and 62.62% or \$1.8 million, respectively.
- For the International Equity mandate, the fee split between Progress Investment Management and the underlying managers is 24.91% or \$0.348 million and 75.09% or \$1.0 million, respectively.
- The fee split between Franklin Templeton and the underlying managers for the Real Estate Fund of Funds mandate is 30.0% or \$177 thousand and 70.0% or \$408 thousand, respectively.
- The fee split between Artemis and the underlying managers for the Real Estate Manager of Managers mandate is 52.0% or \$542 thousand and 48.0% or \$510 thousand, respectively.

Latino American Investment Managers

Increase in Number of Latino American Owned Investment Managers

December 31, 2004 through June 30, 2018



- 6 private equity managers with 15 mandates
- 4 real estate managers with 6 mandates
- 2 equity managers with 3 mandates
- 4 fixed income managers with 5 mandates

Latino American Investment Managers

As of June 30, 2018

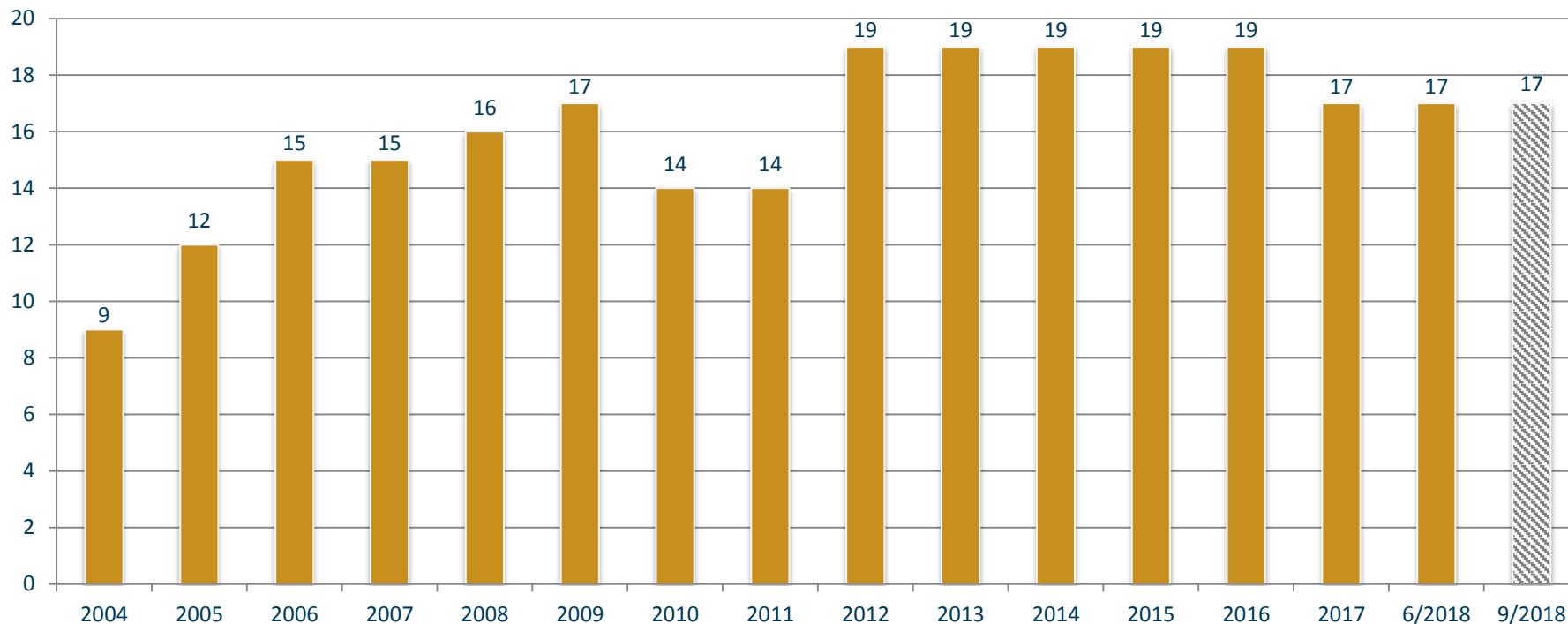
Investment Manager	AUM	% of Total Fund MV	Asset Class	Account Type
Ativo Capital Management	136.4	0.3%	Domestic Equity	Direct Mandate
Ativo Capital Management	38.7	0.1%	International Equity	Progress Investment Management MOM
AUA Private Equity Fund	5.0	0.0%	Private Equity	Direct Mandate
Clearlake Capital Partners III	7.5	0.0%	Private Equity	Abbott Capital FOF
Clearlake Capital Partners V	20.0	0.0%	Private Equity	Direct Mandate
Clearlake Capital Partners V	1.7	0.0%	Private Equity	Abbott Capital FOF
Estancia Capital Partners	5.0	0.0%	Private Equity	Direct Mandate
Garcia Hamilton & Associates	727.2	1.8%	Fixed Income	Direct Mandate
Garcia Hamilton & Associates	65.8	0.2%	Fixed Income	Progress Investment Management MOM
GIA Partners	139.0	0.3%	Fixed Income	Progress Investment Management MOM
Glovista Investments	28.6	0.1%	International Equity	Progress Investment Management MOM
Hispania Private Equity Fund II	1.6	0.0%	Private Equity	Muller & Monroe M2 Private Equity FOF
Hudson Realty Capital V	11.7	0.0%	Real Estate	Franklin Templeton Emerging Manager Real Estate FOF
LM Capital Group	842.1	2.0%	Fixed Income	Direct Mandate
Long Wharf RE Partners IV	13.7	0.0%	Real Estate	Franklin Templeton Emerging Manager Real Estate FOF
Long Wharf RE Partners V	30.0	0.1%	Real Estate	Direct Mandate
New Mainstream Capital II	5.0	0.0%	Private Equity	Direct Mandate
New Mainstream Capital II	4.5	0.0%	Private Equity	Abbott Capital FOF
New Mainstream Capital II	2.3	0.0%	Private Equity	Pantheon FOF
New Mainstream Capital III	25.0	0.1%	Private Equity	Direct Mandate
New Mainstream Capital III	4.3	0.0%	Private Equity	Abbott Capital FOF
New Mainstream Capital III	3.0	0.0%	Private Equity	Pantheon FOF
Oak Street Real Estate Capital III	25.0	0.1%	Real Estate	Direct Mandate
Oak Street Real Estate Capital IV	75.0	0.2%	Real Estate	Direct Mandate
Olympus Property	45.0	0.1%	Real Estate	Artemis Minority Real Estate MOM
Ramirez Asset Management	97.7	0.2%	Fixed Income	Progress Investment Management MOM
Valor Equity Partners III	5.0	0.0%	Private Equity	Direct Mandate
Valor Equity Partners IV	75.0	0.2%	Private Equity	Direct Mandate
Valor M33 II	50.0	0.1%	Private Equity	Direct Mandate
Subtotal	\$2,490.7	6.0%		

Assets under management are in millions

African American Investment Managers

Increase in Number of African American Owned Investment Managers

December 31, 2004 through September 30, 2018



- 6 private equity managers with 21 mandates
- 3 real estate managers
- 2 equity managers with 3 mandates
- 3 fixed income managers
- 3 with both equity and fixed income mandates

Data as of 06/30/18

09/2018 is an Estimate

African American Investment Managers

As of September 30, 2018

Investment Manager	AUM	% of Total Fund MV	Asset Class	Account Type
Advent Capital	48.8	0.1%	Fixed Income	Progress Investment Management MOM
Basis Investment Group	5.0	0.0%	Real Estate	Artemis Minority Real Estate MOM
Brown Capital Management	346.0	0.8%	International Equity	Direct Mandate
Brown Capital Management	74.1	0.2%	International Equity	Progress Investment Management MOM
Channing Capital Management	238.2	0.6%	Domestic Equity	Direct Mandate
DBL Equity Fund- BAEF II, L.P.	1.6	0.0%	Private Equity	Muller & Monroe M2 Private Equity FOF
Earnest Partners	740.5	1.8%	Fixed Income	Direct Mandate
Earnest Partners	643.6	1.6%	International Equity	Direct Mandate
ICV Capital Partners III	20.0	0.0%	Private Equity	Direct Mandate
ICV Capital Partners III	4.5	0.0%	Private Equity	Abbott Capital FOF
ICV Capital Partners III	5.0	0.0%	Private Equity	Pantheon FOF
ICV Capital Partners IV	35.0	0.1%	Private Equity	Direct Mandate
ICV Capital Partners IV	4.3	0.0%	Private Equity	Abbott Capital FOF
ICV Capital Partners IV	3.0	0.0%	Private Equity	Pantheon FOF
Jair Lynch Real Estate Partners	40.0	0.1%	Real Estate	Artemis Minority Real Estate MOM
MCB Real Estate	18.0	0.0%	Real Estate	Artemis Minority Real Estate MOM
Muller & Monroe	2.6	0.0%	Private Equity	Direct Mandate
Piedmont Investment Advisors	1,000.0	2.4%	Domestic Equity	Direct Mandate
Piedmont Investment Advisors	740.8	1.8%	Fixed Income	Direct Mandate
Progress Investment Management	-	-	Fixed Income	Direct Mandate
Progress Investment Management	-	-	International Equity	Direct Mandate
Pugh Capital Management	145.9	0.4%	Fixed Income	Progress Investment Management MOM
Smith Graham	63.9	0.2%	Fixed Income	Progress Investment Management MOM
Smith Whiley III	1.6	0.0%	Private Equity	Muller & Monroe M2 Private Equity FOF
Vista Credit Opportunities Fund I	50.0	0.1%	Private Equity	Direct Mandate
Vista Credit Opportunities Fund II	50.0	0.1%	Private Equity	Direct Mandate
Vista Equity Partners V	100.0	0.2%	Private Equity	Direct Mandate
Vista Equity Partners VI	100.0	0.2%	Private Equity	Direct Mandate
Vista Equity Partners VII	100.0	0.2%	Private Equity	Direct Mandate
Vista Foundation Fund II	15.0	0.0%	Private Equity	Direct Mandate
Vista Foundation Fund III	25.0	0.1%	Private Equity	Direct Mandate
Vistria Fund	15.0	0.0%	Private Equity	Direct Mandate
Vistria Fund	3.1	0.0%	Private Equity	Pantheon FOF
Vistria Fund II	75.0	0.2%	Private Equity	Direct Mandate
Vistria Fund II	3.0	0.0%	Private Equity	Pantheon FOF

Subtotal
Assets under management are in millions

\$4,718

11.4%

Illinois-based Minority Investment Managers

As of June 30, 2018

IMRF's Illinois-based Minority Investment Managers invest over \$850 million across domestic equity, international equity, private equity and real estate asset classes.

Classification	African American	Disabled	Latino	Total \$ AUM
Domestic Equity	\$238,176,304	\$0	\$136,414,512	\$374,590,815
International Equity	0	0	38,743,060	38,743,060
Private Equity*	192,494,789	0	131,563,314	324,058,103
Real Estate*	0	14,849,944	100,000,000	114,849,944
Total	\$430,671,093	\$14,849,944	\$406,720,886	\$852,241,922

**Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Data as of 06/30/18.*

Request for Proposals

Since January 1, 2017, IMRF has issued four RFPs and allocated \$1.0 billion to MWBE investment managers.

Issue Date	End Date	Search Name	Total Allocation	MWBE Manager Allocation	% MWBE	Staff led Search or Callan engaged
2/1/2017	5/19/2017	Publicly Listed Infrastructure Equity and/or Debt and Unlisted Infrastructure Equity and/or Debt*	\$650	0	0.00%	Staff led
6/21/2017	11/17/2017	U.S. Core Real Estate *	300	0	0.00%	Callan engaged
10/16/2017	2/23/2018	MWBE Passive Equity Index Fund	1,000	\$1,000	100.00%	Staff led
2/2/2018	5/18/2018	Global Customized Private Equity Separate Account**	\$300	0	0.00%	Callan engaged
		Total (in millions)	\$1,600	\$1,000	62.50%	
		Total (adjusted for investments not pursued)	\$1,350	\$1,000	74.00%	

*IMRF did not pursue \$100 million of the \$650 million Infrastructure allocation and did not pursue \$150 million of the \$300 million Real Estate allocation.

**Managers have discretion to invest in minority owned firms as part of the mandate.

Request for Proposals

- RFPs are prepared by IMRF Investment Staff and sent to Callan for review and feedback
- IMRF does not engage Callan for all searches
 - Since January 1, 2017, IMRF engaged Callan for two out of four searches
- IMRF does not require a specific length of performance track record or specific amount of assets under management (minimum/maximum amount in strategy or firm)

Transition Management

- Since 2015, IMRF had six transition events which utilized minority and women owned brokerage firms.
 - As Transition Managers: Penserra, Loop Capital
 - As Brokers: Loop Capital, Mary Ramsey, Guzman, Penserra, Cabrera Capital, C.L. King, Drexel Hamilton, Nathan Hale, Samuel A. Ramirez, and Williams Capital Group
- For the five Equity transition events, MWBE brokerage firms earned 73.59% of all Equity commissions
- For the one Fixed Income transition event, MWBE brokerage firms traded 28.03% of total PAR
- All transition managers are required to meet or exceed IMRF's brokerage goals for the specific asset class as stated in the IMRF's Statement of Investment Policy

Graduation

- The Emerging Manager Program, as IMRF refers to it, is made up of all Emerging/Minority Managers hired directly by IMRF or by IMRF's Manager of Managers/Fund of Funds platforms.
- All Emerging/Minority investment managers investing assets on IMRF's behalf are considered part of the IMRF portfolio.
- IMRF does not have a separate asset allocation amount for its Emerging Manager Program because IMRF does not restrict the manager to a pre-specified program allocation.
- IMRF believes that all of its minority managers should be eligible for additional allocations during all rebalancing and strategic asset allocation decisions.
- As of June 30, 2018, Emerging/Diverse managers invest \$7.59 billion or 18.4% of IMRF's total portfolio.
- \$6.08 billion or 80.2% are direct relationships and \$1.51 billion or 19.8% are Manager of Managers/Fund of Funds platforms.