Illinois Municipal Retirement Fund

Senate Committee on Pensions and Investments

Louis W. Kosiba, IMRF Executive Director

Dhvani Shah, IMRF Chief Investment Officer

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

August 12, 2016



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 to pursue opportunities from IMRF
- IMRF has a dedicated team that focuses on meeting with firms owned by minorities, females and persons with a disability
- In 2015, IMRF staff held 260 meetings with prospective managers. 63 meetings were with firms owned by minorities, females and persons with a disability
- As of July 2016, IMRF staff held 165 meetings with prospective managers. 40 meetings were with firms owned by minorities, females and persons with a disability

Key Highlights Since November 2015 Hearing

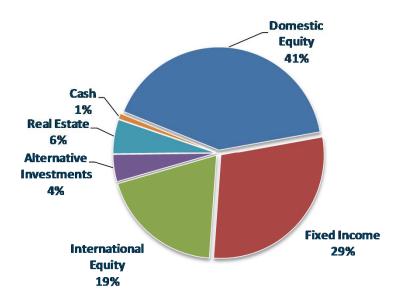
- Adopted Aspirational Goal in IMRF's Investment Policy that 20% of assets will be managed by firms owned by minorities, females and persons with a disability
- Amended Statement of Investment Policy to include updated minority manager and broker/dealer goals
- Updated job descriptions for Executive Director, Chief Investment Officer, and Directors related to achieving the Aspirational Goal
- Hosted the National Association of Investment Companies (NAIC) and their members at IMRF offices
- Facilitated dialogue between minority brokers and IMRF's investment managers to expand trading opportunities across multiple product types
- Encouraged Wilshire to increase its emerging and minority manager efforts
 - Year to date, Wilshire's Manager Research team met with 100 emerging strategies, including 24 MWBE strategies.
 - In August, 12 MWBE firms participated in Wilshire Wide, a series of webinars for emerging firms to learn about Wilshire's internal research process and engage with senior investment professionals
- Participated in industry events such as PE WIN, NAA, ILPA, WIRE, Toigo, Progress, REEM, Consortium, and NASP

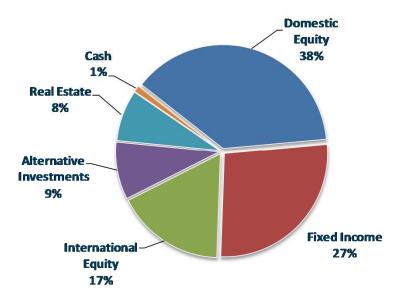
How is the money invested?

As of March 31, 2016, IMRF's total market value was \$34.3 billion



Target Asset Allocation





How is the money invested?

As of March 31, 2016, IMRF's total market value was \$34.3 billion

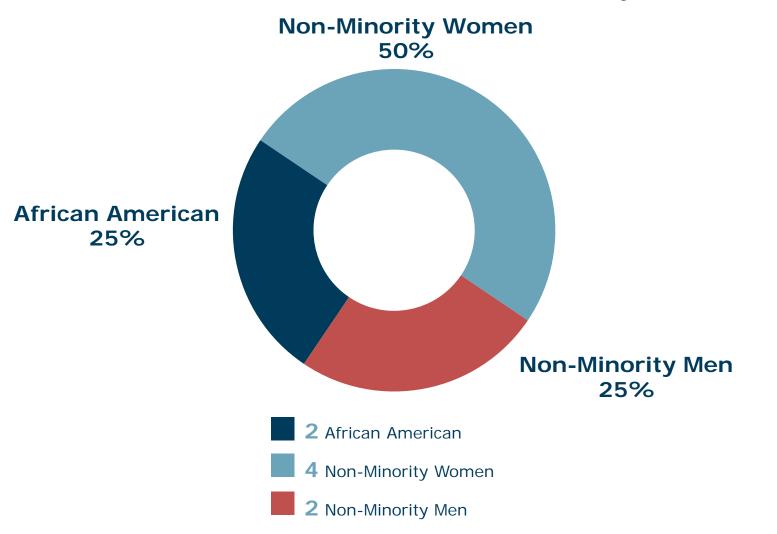
Asset Class	\$ Millions Actual	Percent Actual	Percent Target	Percent Difference	\$Millions Difference
Domestic Equity	14,095	41.0%	38.00%	3.0%	1,046.1
International Equity	6,667	19.4%	17.00%	2.4%	829.7
Fixed Income	9,950	29.0%	27.00%	2.0%	678.2
Real Estate ¹	1,866	5.4%	8.00%	(2.6%)	(881.0)
Alternative Investments ²	1,461	4.3%	9.00%	(4.7%)	(1,629.8)
Cash	300	0.9%	1.00%	(0.1%)	(43.2)
Total	34,339	100.0%	100.0%		

¹ Including \$948 million in unfunded commitments, Real Estate represents 8.2% as of 5/31/2016.

² Including \$800 million in unfunded commitments, Alternatives represents 6.3% as of 5/31/2016.

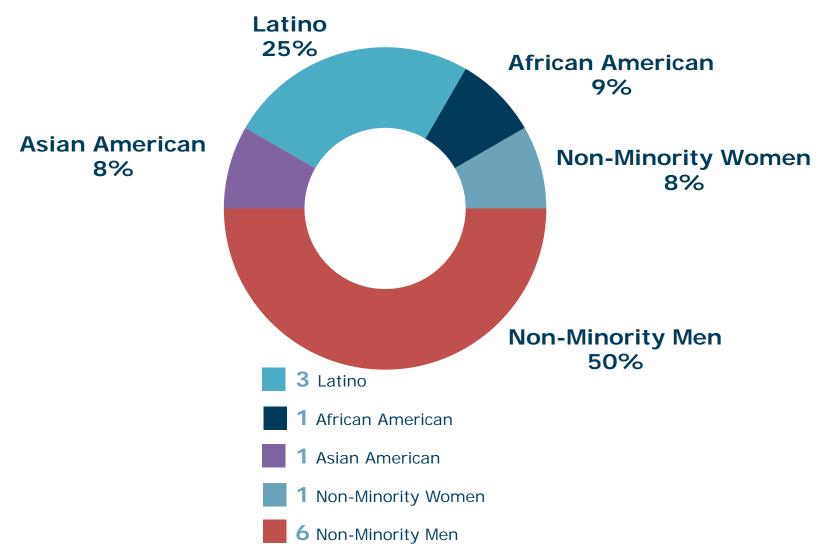
IMRF Board of Trustees

The IMRF Board of Trustees is 75% minority or women.



IMRF Investments Team

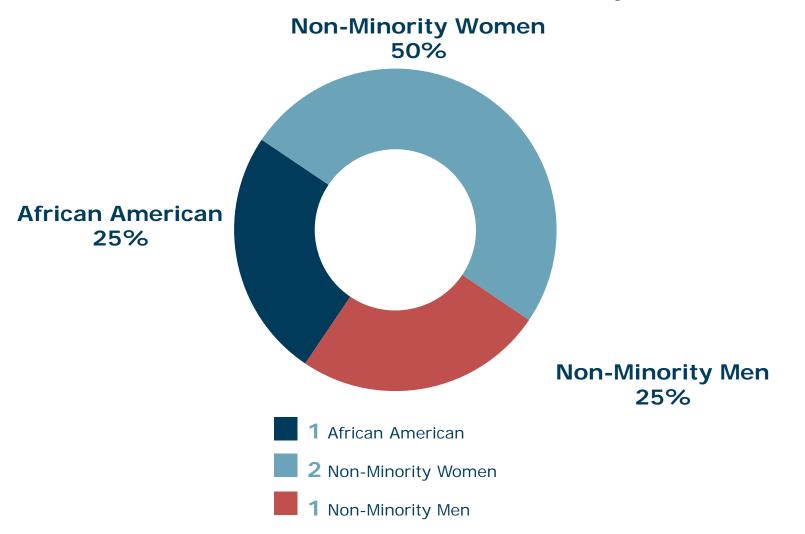
The IMRF Investment team is 50% minority or women.



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IMRF Investment Consultants

The IMRF Consultant team is 75% minority or women.



2015 Minority Manager Allocations

In 2015, \$560 million or 23.7% of all capital allocations were directed to minority managers.

- Fixed Income \$450 million in allocations
 - \$100 million direct mandate to Garcia Hamilton (Latino)
 - \$150 million added to Garcia Hamilton (Latino)
 - \$200 million added to Progress Fixed Income Manager of Managers program (African American)

2015 Minority Manager Allocations

- Private Equity \$10 million in commitments
 - \$10 million additional commitment to Vistria Fund (African American, Illinois based)
- Real Estate \$100 million in commitments
 - \$25 million direct mandate to Oak Street Real Estate Capital Fund III (Latino, Illinois based)
 - \$75 million evergreen mandate to Artemis Real Estate Minority Manager of Managers Program (Female)

2016 Minority Manager Allocations

As of July 2016, \$575 million or 70.2% of all capital allocations were directed to minority managers.

- Fixed Income \$275 million in allocations
- Domestic Equity \$50 million in allocations
- Real Estate \$55 million in allocations*
- Private Equity \$195 million in commitments or 69.8% of all Private Equity commitments

* In July 2016, the IMRF Board of Trustees committed \$30 million to Long Wharf V, a Latino owned real estate firm. This mandate is in legal due diligence.

Minority Investment Manager Policy

The Illinois Municipal Retirement Fund is committed to providing opportunities for minority and female 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, females and persons with a disability.

Investment Manager Classification	Minimum Goal as a % of the Total IMRF Portfolio	As of 3/31/16 Actual % of Total Fund Market Value	Minority Investment Managers' AUM
Minority Owned Businesses	13%	16.79%	\$ 5.77 billion
Female Owned Businesses	6%	3.42%	\$ 1.18 billion
Businesses Owned by a Person with a Disability	1%	0.04%	\$ 0.01 billion
Total Minority, Female and Disabled Owned Investment Management Firms	20%	20.25%	\$ 6.96 billion

Minority Investment Managers

As of March 31, 2016

IMRF's Minority Investment Managers invest over \$6.9 billion in active strategies across domestic equity, international equity, fixed income, hedge funds, 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	\$1.595 billion	\$14.095 billion	8%	11.3%	4.6%	6.5%
Fixed Income	3.099 billion	9.949 billion	20%	31.2%	9.0%	12.7%
Hedge Fund	0.081 billion	0.355 billion	15%	22.8%	0.2%	0.3%
International Equity	1.518 billion	6.667 billion	15%	22.8%	4.4%	6.2%
Private Equity*	0.501 billion	2.019 billion	10%	24.8%	1.5%	2.0%
Real Estate*	0.162 billion	2.651 billion	4%	6.1%	0.5%	0.7%
Total	\$ 6.956 billion				20.3%	28.5%

*Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Values as of 3/31/16. Total Fund Market Value equals \$34,339,245,456. Total Active Strategies equal \$24,424,390,420.

African American Investment Managers As of March 31, 2016

IMRF's African American Investment Managers manage over \$3.5 billion across domestic equity, international equity, fixed income, hedge funds and private equity asset classes.

African American	\$ AUM	Asset Class \$ AUM	% of Asset Class
Domestic Equity	1,055,596,120	14,095,036,954	7.5%
Fixed Income	1,295,860,345	9,949,773,385	13.0%
Hedge Fund	11,563,240	355,104,409	3.3%
International Equity	802,152,082	6,667,400,130	12.0%
Private Equity*	405,799,156	2,018,980,493	20.1%
Total	3,570,970,943		

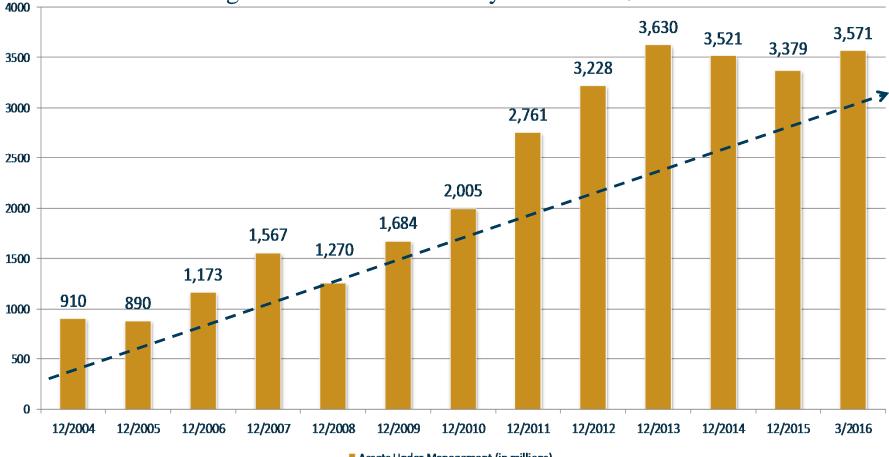
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African American Investment Managers

History of African American Owned Investment Managers

December 31, 2004 through March 31, 2016

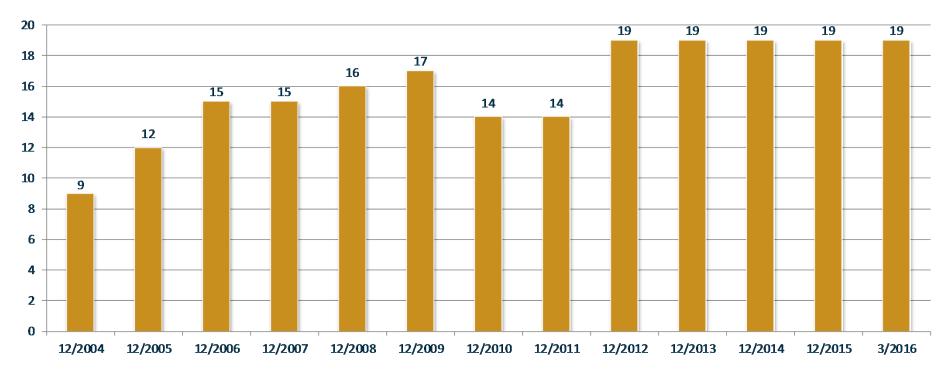
Assets under management have increased by more than \$2.6 billion since 2004



Assets Under Management (in millions)

African American Investment Managers

Increase in Number of African American Owned Investment Managers December 31, 2004 through March 31, 2016



- 9 private equity managers
- 1 hedge fund managers
- 4 equity managers
- 3 fixed income managers
- 2 with both equity and fixed income mandates

African American Investment Managers

As of March 31, 2016

Investment Manager	AUM	% of Total Fund MV	Asset Class	Account Type
Advent Capital	29.6	0.1%	Fixed Income	Progress Investment Management MOM
Ariel Investments	62.6	0.2%	Domestic Equity	Direct Mandate
Ascend Ventures	1.4	0.0%	Private Equity	Muller & Monroe Illinois Private Equity FOF
Brown Capital Management	285.1	0.8%	International Equity	Direct Mandate
Brown Capital Management	41.9	0.1%	International Equity	Progress Investment Management MOM
Channing Capital Management	166.1	0.5%	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	569.0	1.7%	Fixed Income	Direct Mandate
Earnest Partners	475.2	1.4%	International Equity	Direct Mandate
Elizabeth Park Capital	11.6	0.0%	Hedge Fund	Aurora Investment Management FOF
Holland Capital Management	827.0	2.4%	Domestic Equity	Direct Mandate
ICV Capital Partners II	0.9	0.0%	Private Equity	Muller & Monroe Illinois Private Equity FOF
ICV Capital Partners III	20.0	0.1%	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
Muller & Monroe	4.7	0.0%	Private Equity	Direct Mandate
Muller & Monroe	2.6	0.0%	Private Equity	Direct Mandate
Piedmont Investment Advisors	554.3	1.6%	Fixed Income	Direct Mandate
Progress Investment Management	-	-	Fixed Income	Direct Mandate
Progress Investment Management	-	-	International Equity	Direct Mandate
Pugh Capital Management	143.1	0.4%	Fixed Income	Progress Investment Management MOM
RLJ Equity Partners	2.2	0.0%	Private Equity	Muller & Monroe Illinois Private Equity FOF
Smith Whiley II	1.7	0.0%	Private Equity	Muller & Monroe Illinois Private Equity FOF
Smith Whiley III	1.6	0.0%	Private Equity	Muller & Monroe M2 Private Equity FOF
Syncom V	1.7	0.0%	Private Equity	Muller & Monroe Illinois Private Equity FOF
Vista Credit Opportunity Fund I	50.0	0.1%	Private Equity	Direct Mandate
Vista Credit Opportunity Fund II	50.0	0.1%	Private Equity	Direct Mandate
Vista Equity Partners V	100.0	0.3%	Private Equity	Direct Mandate
Vista Equity Partners VI	100.0	0.3%	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	3.0	0.0%	Private Equity	Pantheon FOF
Subtotal	\$3,571	10.4%		
Assats under management are in millions				

Assets under management are in millions

Latino American Investment Managers As of March 31, 2016

IMRF's Latino American Investment Managers manage over \$2.0 billion across domestic equity, international equity, fixed income, hedge funds, private equity and real estate asset classes.

Latino	\$ AUM	Asset Class \$ AUM	% of Asset Class
Domestic Equity	372,055,690	14,095,036,954	2.6%
Fixed Income	1,475,732,079	9,949,773,385	14.8%
Hedge Fund	27,079,143	355,104,409	7.6%
International Equity	115,912,269	6,667,400,130	1.7%
Private Equity*	36,581,047	2,018,980,493	1.8%
Real Estate*	50,401,220	2,650,600,000	1.9%
Total	2,077,761,448		

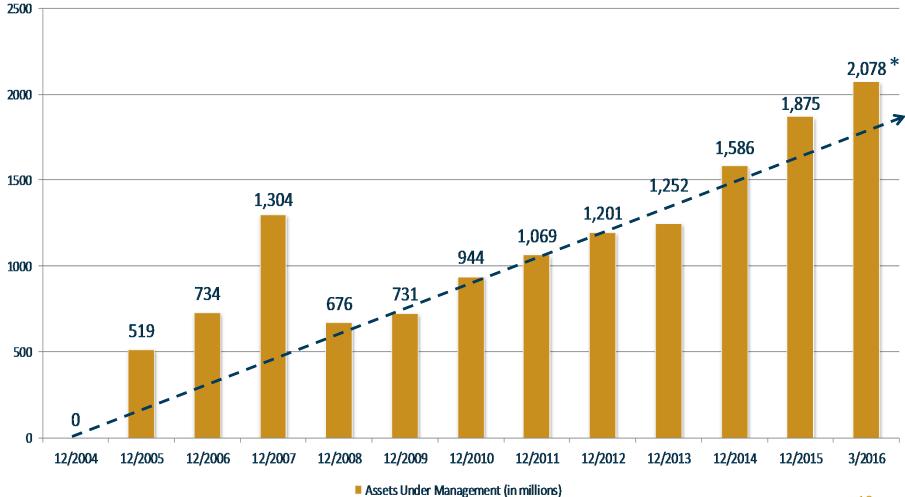
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Latino American Investment Managers

History of Latino American Owned Investment Managers

December 31, 2004 through March 31, 2016

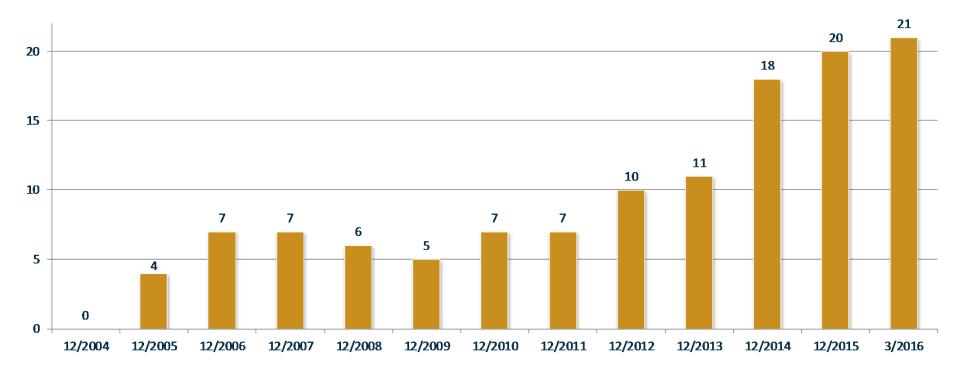
Assets under management have increased by more than \$2.0 billion since 2004



* In July 2016, the IMRF Board of Trustees committed \$30 million to Long Wharf V, a Latino owned real estate firm. This mandate is in legal due diligence.

Latino American Investment Managers

Increase in Number of Latino American Owned Investment Managers December 31, 2004 through March 31, 2016



- 7 private equity managers
- 3 real estate managers
- 3 hedge fund managers
- 4 equity managers
- 4 fixed income managers

Latino American Investment Managers

As of March 31, 2016

Investment Manager	AUM	% of Total Fund MV	Asset Class	Account Type
Ativo Capital Management	50.9	0.1%	Domestic Equity	Direct Mandate
Ativo Capital Management	46.7	0.1%	International Equit	tyProgress Investment Management MOM
AUA Private Equity	5.0	0.0%	Private Equity	Direct Mandate
Clearlake Capital Group	7.5	0.0%	Private Equity	Abbott Capital FOF
Estancia Capital Partners	5.0	0.0%	Private Equity	Direct Mandate
Garcia Hamilton & Associates	255.7	0.7%	Fixed Income	Direct Mandate
Garcia Hamilton & Associates	126.8	0.4%	Fixed Income	Progress Investment Management MOM
GIA Partners	132.0	0.4%	Fixed Income	Progress Investment Management MOM
Glovista Investments	39.7	0.1%	International Equit	tyProgress 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	878.3	2.6%	Fixed Income	Direct Mandate
Lombardia Capital Partners	148.3	0.4%	Domestic Equity	Direct Mandate
Lombardia Capital Partners	29.5	0.1%	International Equit	tyDirect Mandate
Long Wharf IV	13.7	0.0%	Real Estate	Franklin Templeton Emerging Manager Real Estate FOF
Miura Global Partners II, L.P.	17.0	0.0%	Hedge Fund	Aurora Investment Management FOF
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
Nogales Investors II	0.7	0.0%	Private Equity	Muller & Monroe Illinois Private Equity FOF
Oak Street Real Estate Capital III	25.0	0.1%	Real Estate	Direct Mandate
Ramirez Asset Management	83.1	0.2%	Fixed Income	Progress Investment Management MOM
Roystone Capital Partners L.P.	10.1	0.0%	Hedge Fund	Aurora Investment Management FOF
Valor Equity Partners III	5.0	0.0%	Private Equity	Direct Mandate
Wall Street Associates	172.8	0.5%	Domestic Equity	Direct Mandate
Subtotal	\$2,078	6.1%		

Assets under management are in millions

Investment Management Fees

In 2015, IMRF paid over \$27 million in investment management fees to minority managers.

Classification	Minority \$ Fees Paid	Minority % of Fees Paid	% of Total Fees
African American	15,267,918	54.8%	11.3%
Latino	5,658,190	20.3%	4.2%
Asian	2,823,323	10.1%	2.1%
Female	3,942,989	14.2%	2.9%
Disabled	163,909	0.6%	0.1%
Total	27,856,328		

Asset Class	Minority \$ Fees Paid	Asset Class \$ Fees Paid	Minority % of Asset Class Fees Paid
Domestic Equity	5,444,020	38,485,310	14.1%
Fixed Income	5,980,562	14,384,578	41.6%
Hedge Fund	3,340,722	14,958,873	22.3%
International Equity	7,790,802	26,027,271	29.9%
Private Equity	4,514,075	17,341,928	26.0%
Real Estate	786,148	22,413,798	3.5%
Agriculture	0	985,710	0.0%
Timber	0	758,741	0.0%
Total	27,856,328	135,356,208	20.6%

Illinois-based Investment Managers As of March 31, 2016

IMRF's Illinois-based Investment Managers invest over \$13.2 billion across domestic equity, international equity, fixed income, hedge funds, private equity and real estate asset classes.

Asset Class	IL \$ AUM	Asset Class \$ AUM	IL % of Asset Class
Domestic Equity	8,592,743,753	14,095,036,954	61.0%
Fixed Income	1,515,015,780	9,949,773,385	15.2%
International Equity	2,871,709,927	6,667,400,130	43.1%
Private Equity*	146,901,544	2,018,980,493	7.3%
Real Estate*	159,849,944	2,650,600,000	6.0%
Total	13,286,220,948		

*Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Values as of 3/31/16.

Illinois-based Minority Investment Managers As of March 31, 2016

IMRF's Illinois-based Minority Investment Managers invest over \$1.4 billion across domestic equity, international equity, hedge funds, private equity and real estate asset classes.

Classification	African American	Disabled	Latino	Total \$ AUM
Domestic Equity	1,055,596,120	0	199,221,607	1,254,817,727
International Equity	0	0	46,681,842	46,681,842
Private Equity*	122,186,176	0	6,563,314	128,749,490
Real Estate*	0	14,849,944	25,000,000	39,849,944
Total	1,177,782,296	14,849,944	277,466,763	1,470,099,003

*Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Values as of 3/31/16.

Minority Brokerage Policy

The Illinois Municipal Retirement Fund is committed to providing opportunities for minority owned and female owned broker/dealers and broker/dealers owned by a person with a disability. As of March 31, 2016, IMRF is exceeding its minimum goals.

Asset Class	Minimum Goal	Actual Minority Percentage Goal Achieved	% Exceeding Minimum Goal
U.S. Equities	25%	39.4%	14.4%
U.S. Large-Cap Equities	30%	45.4%	15.4%
U.S. Micro-Cap Equities	7%	30.4%	23.4%
International Equities	20%	31.6%	11.6%
Fixed Income	22%	30.2%	8.2%
High Yield Bonds	5%	5.6%	0.6%
International Small-Cap Equities	5%	9.6%	4.6%
Emerging Market Equities	5%	No separate account mandates in this asset class	N/A
Emerging Market Debt	Best Efforts	0.2%	N/A
Bank Loans	Best Efforts	No separate account mandates in this asset class	N/A
Opportunistic Strategies	Best Efforts	No separate account mandates in this asset class	N/A
Hedge Funds	Best Efforts	No separate account mandates in this asset class	N/A

Goals for U.S. Equities, Fixed Income and Micro Cap Equities were increased in 2013 to 25%, 22% and 7%, respectively. As of 01/2016, U.S. Large-Cap equities has a 30% goal.

Minority Broker/Dealers

As of March 2016, IMRF's Investment Managers executed trades with minority brokers generating over \$639 thousand in commissions across domestic equity and international equity. For fixed income, minority brokers accounted for 2.3 billion par volume traded.

Classification	Commissions Paid	% of Total Commissions Paid
African American	\$224,566	10.2%
Disabled	\$31,550	1.4%
Latino	\$77,034	3.5%
Women-Owned	\$306,037	13.9%
Total Minority	\$639,187	29.08%

Total commissions paid is \$2,197,764

Classification	Par Volume Traded	% of Total Par Volume Traded
African American	2,199,371,801	9.6%
Disabled	28,585,000	0.1%
Latino	84,248,621	0.4%
Women-Owned	73,073,640	0.3%
Native American	9,655,000	0.0%
Total Minority	2,394,934,061	10.40%

Total par volume traded is 23,023,884,709