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

October 16th & 17th, 2017.



Where does the money come from?



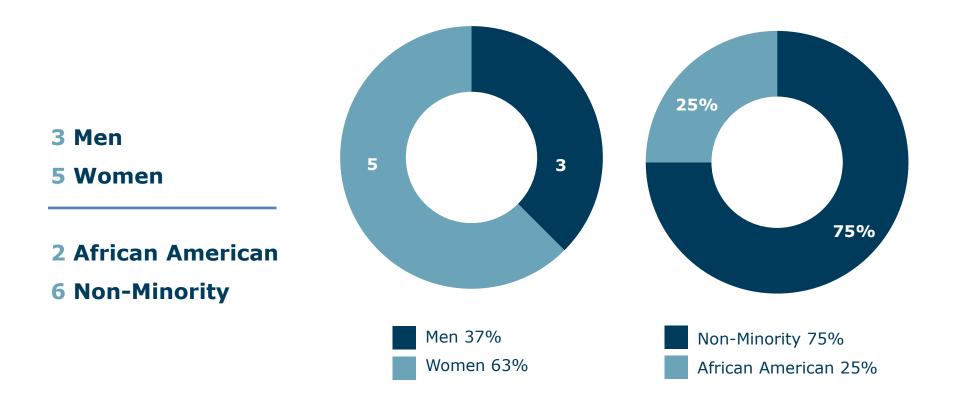
How does IMRF help Illinois' economy?

- \$15.4 billion of IMRF's assets are managed by Illinoisbased Investment Management firms.
- \$1.6 billion of IMRF's assets are managed by Illinoisbased Investment Management firms owned by minorities, females and persons with a disability.
- Retirees spend their money in Illinois
 - 86% of retired members remain in Illinois
 - In 2016, IMRF paid \$1.6 billion to Illinois retirees
 - Payments generated \$2.34 billion in economic activity*
 - Supported creation of 16,843 jobs

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

IMRF Board of Trustees

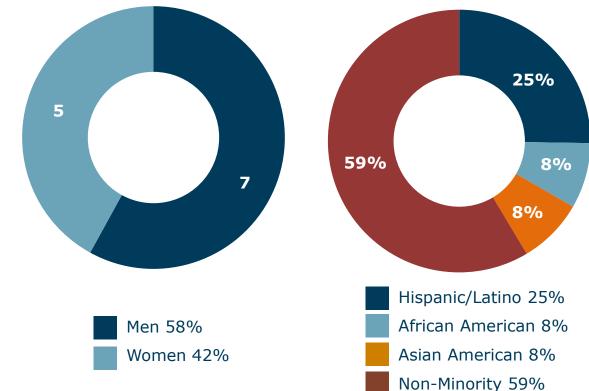
The IMRF Board of Trustees has 8 members:



IMRF Investments Team

The IMRF Investments Team has 12 employees:

7 Men
5 Women
3 Hispanic/Latino
1 African American
1 Asian American
7 Non-Minority



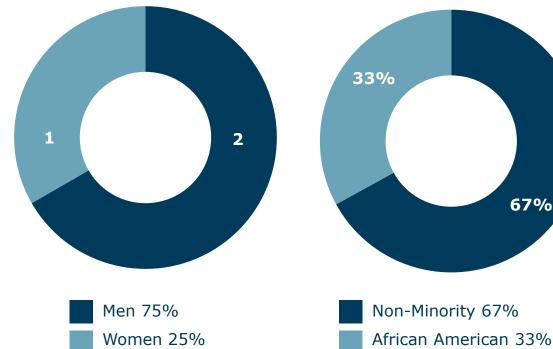
IMRF Investment Consultants

The IMRF Consultant team has 3 members:

2 Men

1 Women

1 African American **2** Non-Minority



67% Non-Minority 67%

IMRF's Commitment to Diversity and Inclusion

- Support the Emerging Investment Manager Community (NAA, NASP, Toigo, SEO, PE WIN, WIRE, REEM, Progress, and Consortium)
- Amended IMRF's Statement of Investment Policy to include updated minority manager and broker/dealer goals
- Updated job descriptions for Executive Director, Chief Investment Officer, and Directors

IMRF's Open Door Policy

- IMRF has an open door policy for meeting with investment managers and broker/dealers, in general
- 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, females and persons with a disability
- In 2016, IMRF staff held 269 meetings with prospective managers. 67 meetings were with firms owned by minorities, females and persons with a disability
- As of August 2017, IMRF staff held 230 meetings with prospective managers. 50 meetings were with firms owned by minorities, females and persons with a disability

2016 Minority Manager Allocations

In 2016, \$725 million or 46.7% of all new capital allocations were directed to Minority Managers.

- Private Equity \$270 million in commitments
 - \$100 million committed to Vista Equity VI (African American)
 - \$75 million committed to Vistria Fund II (African American, Illinois Based)
 - \$50 million committed Vista Credit Opportunities Fund II (African American, Illinois Based)
 - \$25 million committed to Vista Foundation Fund III (African American)
 - \$20 million committed to Mayfield Select and Mayfield XV (Asian American)

2016 Minority Manager Allocations

- Real Estate \$130 million in commitments
 - \$75 million direct mandate to Oak Street RE Capital Fund IV (Latino, Illinois based)
 - \$30 million direct mandate to Long Wharf RE Partners V (Latino)
 - \$25 million direct mandate to Artemis RE Partners Healthcare Fund I (Women)
- Fixed Income \$275 million in allocations
 - \$275 million added to Garcia Hamilton (Latino)
- Domestic Equity \$50 million in allocations
 - \$50 million added to Ativo Capital (Latino)

2017 Minority Manager Allocations

As of August 2017, \$810 million or 40.7% of all capital allocations were directed to Minority Managers.

- Fixed Income \$600 million in allocations
- Real Estate \$75 million in allocations
- Private Equity \$135 million in commitments* or 69.2% of all Private Equity commitments

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 3/31/17 Actual % of Total Fund Market Value
Minority Owned Businesses	13%	16.40%
Female Owned Businesses	6%	3.05%
Businesses Owned by a Person with a Disability	1%	0.04%
Total Minority, Female and Disabled Owned Investment Management Firms	20%	19.49%

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.

Asset Class	Minimum Goal as a % of Each Asset Class	As of 3/31/17 Actual % of Asset Class
Domestic Equity	8%	8.2%
International Equity	15%	23.0%
Fixed Income	20%	32.4%
Real Estate*	4%	11.8%
Private Equity*	10%	25.5%
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. Values as of 3/31/17

Minority Investment Managers

As of March 31, 2017

IMRF's Minority Investment Managers invest over \$7.3 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	\$1.349 billion	\$16.441 billion	8%	8.2%	3.6%	5.2%
Fixed Income	3.341 billion	10.306 billion	25%	32.4%	8.9%	12.8%
International Equity	1.687 billion	7.327 billion	15%	23.0%	4.5%	6.4%
Private Equity*	0.571 billion	2.236 billion	10%	25.5%	1.5%	2.2%
Real Estate*	0.367 billion	3.101 billion	4%	11.8%	1.0%	1.4%
Total	\$ 7.323 billion				19.5%	28.0%

*Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Values as of 3/31/17. Total Fund Market Value equals \$37,576,013,621. Total Active Strategies equal \$26,168,431,860.

African American Investment Managers As of March 31, 2017

IMRF's African American Investment Managers manage over \$3.9 billion across domestic equity, international equity, fixed income, and private equity asset classes.

African American	\$ AUM	Asset Class \$ AUM	% of Asset Class
Domestic Equity	1,227,034,333	16,440,844,735	7.5%
Fixed Income	1,289,083,963	10,306,206,625	12.5%
International Equity	903,490,435	7,327,276,591	12.3%
Private Equity*	468,338,451	2,236,490,131	20.9%
Real Estate*	40,000,000	3,100,900,000	1.3%
Total	3,927,947,182		

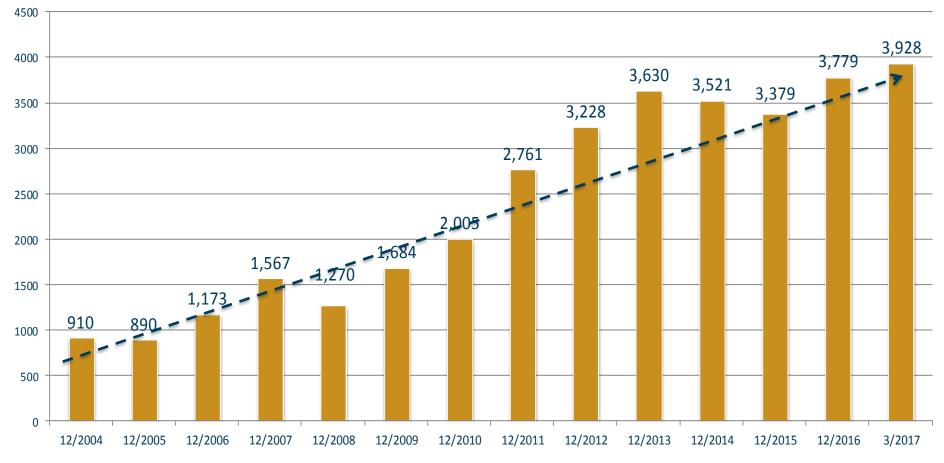
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African American Investment Managers

History of African American Owned Investment Managers

December 31, 2004 through March 31, 2017

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

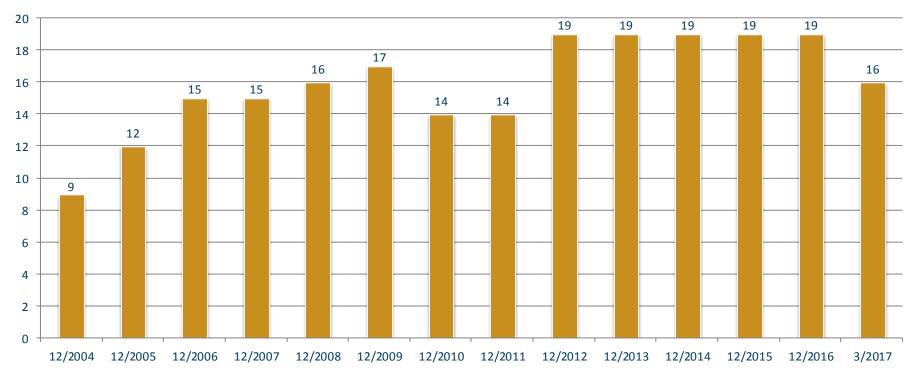


Assets Under Management (in millions)

African American Investment Managers

Increase in Number of African American Owned Investment Managers

December 31, 2004 through March 31, 2017



- 6 private equity managers with 15 mandates
- 1 real estate manager
- 4 equity managers
- 3 fixed income managers
- 2 with both equity and fixed income mandates

African American Investment Managers As of March 31, 2017

Investment Manager	AUM	% of Total Fund MV	Asset Class	Account Type
Advent Capital	46.5	0.1%	Fixed Income	Progress Investment Management MOM
Ariel Investments	73.9	0.2%	Domestic Equity	Direct Mandate
Brown Capital Management	296.1	0.8%	International Equity	Direct Mandate
Brown Capital Management	48.6	0.1%	International Equity	Progress Investment Management MOM
Channing Capital Management	214.4	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	548.8	1.5%	Fixed Income	Direct Mandate
Earnest Partners	558.8	1.5%	International Equity	Direct Mandate
Holland Capital Management	938.7	2.5%	Domestic Equity	Direct Mandate
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
Jair Lynch Real Estate Partners	40.0	0.1%	Real Estate	Artemis Minority Real Estate MOM
Muller & Monroe	2.5	0.0%	Private Equity	Direct Mandate
Piedmont Investment Advisors	549.9	1.5%	Fixed Income	Direct Mandate
Progress Investment Management	-	-	Fixed Income	Direct Mandate
Progress Investment Management	-	-	International Equity	Direct Mandate
Pugh Capital Management	143.8	0.4%	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	0.3%	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	3.1	0.0%	Private Equity	Pantheon FOF
Vistria Fund II	75.0	0.2%	Private Equity	Direct Mandate
Subtotal	\$3,927.9	10.4%		

Assets under management are in millions

Latino American Investment Managers As of March 31, 2017

IMRF's Latino American Investment Managers manage over \$2.1 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	121,790,571	16,440,844,735	0.7%
Fixed Income	1,740,189,192	10,306,206,625	16.9%
Hedge Fund	2,927,600	33,634,195	8.7%
International Equity	59,519,374	7,327,276,591	0.8%
Private Equity*	35,832,082	2,236,490,131	1.6%
Real Estate*	155,401,220	3,100,900,000	5.0%
Total	2,115,660,039		

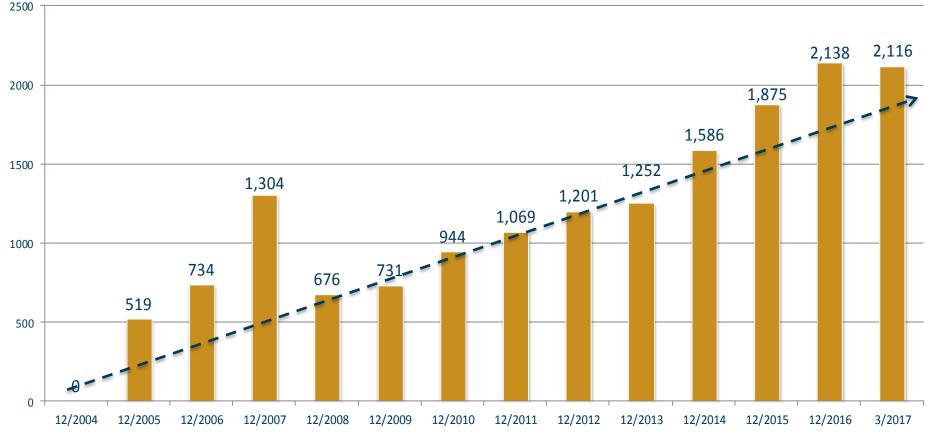
*Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. The Hedge Fund asset class is in liquidation. Values as of 3/31/17.

Latino American Investment Managers

History of Latino American Owned Investment Managers

December 31, 2004 through March 31, 2017

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

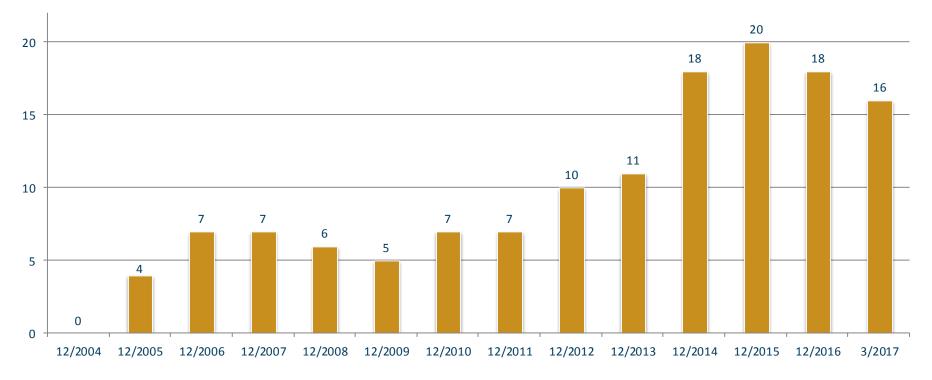


Assets Under Management (in millions)

Latino American Investment Managers

Increase in Number of Latino American Owned Investment Managers

December 31, 2004 through March 31, 2017



- 6 private equity managers with 8 mandates
- 3 real estate managers with 5 mandates
- 1 hedge fund manager
- 2 equity managers with 3 mandates
- 4 fixed income managers with 5 mandates

Latino American Investment Managers

As of March 31, 2017

Investment Manager	AUM	% of Total Fund MV	Asset Class	Account Type
Ativo Capital Management	121.8	0.3%	Domestic Equity	Direct Mandate
Ativo Capital Management	33.9	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
Estancia Capital Partners	5.0	0.0%	Private Equity	Direct Mandate
Garcia Hamilton & Associates	521.1	1.4%	Fixed Income	Direct Mandate
Garcia Hamilton & Associates	127.7	0.3%	Fixed Income	Progress Investment Management MOM
GIA Partners	137.2	0.4%	Fixed Income	Progress Investment Management MOM
Glovista Investments	25.7	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	859.2	2.3%	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
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
Ramirez Asset Management	95.0	0.3%	Fixed Income	Progress Investment Management MOM
Roystone Capital Partners L.P.	2.9	0.00	Hedge Fund	Aurora Investment Management FOF
Valor Equity Partners III	5.0	0.0%	Private Equity	Direct Mandate
Subtotal	\$2,115.6	5.6%		

Investment Management Fees

In 2016, IMRF paid over \$28 million in investment management fees to minority managers.

Classification		Minority \$		Minority % of		% of Total	
Classificat	Fees Paid			Fees Paid		Fees	
African Amer	rican	15,536,9	89	54	1.8%	12.6%	
Latino		7,533,42	23	26	5.6%	6.1%	
Asian		1,101,8	35	3	8.9%	0.9%	
Female		3,944,6	06	13	8.9%	3.2%	
Disabled		225,34	46	().8%	0.2%	
Total		28,342,19	98				
Asset Class	Min	ority \$ Fees		sset Class \$		ority % of As	
		Paid		Fees Paid	C	ass Fees Pai	d
Domestic Equity		5,696,238		33,788,728		16.	9%
Fixed Income		6,669,374		14,903,470		44.8%	
Hedge Fund		947,632		6,115,628		15.5%	
International Equity		7,796,749		23,976,056		32.5%	
Private Equity	5,068,854			17,094,299) 29		7%
Real Estate	2,163,351			25,775,263	3 8		4%
Agriculture		0		1,062,918		0.	0%
Timber		0		745,073		0.	0%
Total		28,342,198	1	23,461,435		23.	0%

Illinois-based Investment Managers As of March 31, 2017

IMRF's Illinois-based Investment Managers invest over \$15.4 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	10,448,780,375	16,440,844,735	63.6%
Fixed Income	1,521,620,770	10,306,206,625	14.8%
International Equity	3,032,732,730	7,327,276,591	41.4%
Private Equity*	213,798,718	2,236,490,131	9.6%
Real Estate*	234,849,944	3,100,900,000	7.6%
Total	15,451,782,536		

*Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Values as of 3/31/17.

Illinois-based Minority Investment Managers As of March 31, 2017

IMRF's Illinois-based Minority Investment Managers invest over \$1.6 billion across domestic equity, international equity, private equity and real estate asset classes.

Classification	African American	Disabled	Latino	Total \$ AUM
Domestic Equity	1,227,034,333	0	121,790,571	1,348,824,903
International Equity	0	0	33,865,228	33,865,228
Private Equity*	195,574,383	0	6,563,314	202,137,697
Real Estate*	0	14,849,944	100,000,000	114,849,944
Total	1,422,608,716	14,849,944	262,219,113	1,699,677,773

*Private Equity and Real Estate are based on committed amounts. Fund of Fund values are reported at the underlying manager level. Values as of 3/31/17.

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. The below information is as of March 31, 2017.

Asset Class	Minimum Goal	Actual Minority Percentage Goal Achieved	% Exceeding Minimum Goal
U.S. Equities	25%	35.7%	10.7%
U.S. Large-Cap Equities	30%	49.6%	19.6%
U.S. Micro-Cap Equities	7%	23.8%	16.8%
International Equities	20%	29.2%	9.2%
Fixed Income	22%	30.0%	8.0%
High Yield Bonds	5%	9.5%	4.5%
International Small-Cap Equities	5%	14.7%	9.7%
Emerging Market Equities	5%	No separate account mandates in this asset class	N/A
Emerging Market Debt	Best Efforts	0.0%	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

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 31, 2017, IMRF's Investment Managers executed trades with Minority brokers generating over \$711 thousand in commissions across domestic equity and international equity. For fixed income, Minority brokers accounted for 2 billion par volume traded.

Classification	Commissions Paid	% of Total Commissions Paid
African American	\$246,441	9.8%
Disabled	\$66,928	2.6%
Latino	\$115,781	4.6%
Women-Owned	\$269,965	10.7%
Native American	\$12,696	0.5%
Total Minority	\$711,811	28.16%

Total commissions paid is \$2,527,435

Classification	Par Volume Traded	% of Total Par Volume Traded
African American	964,079,818	3.6%
Disabled	442,685,673	1.7%
Latino	502,374,346	1.9%
Women-Owned	100,377,533	0.4%
Total Minority	2,009,517,370	7.52%

Total par volume traded is 26,737,429,839