

BLACKROCK MUNIHOLDINGS FUND, INC.
Form N-Q
September 22, 2015

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-Q

**QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED
MANAGEMENT INVESTMENT COMPANY**

Investment Company Act file number: 811-08081

Name of Fund: BlackRock MuniHoldings Fund, Inc. (MHD)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock
MuniHoldings Fund, Inc., 55 East 52nd Street, New York, NY 10055

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 04/30/2016

Date of reporting period: 07/31/2015

Item 1 Schedule of Investments

Schedule of Investments July 31, 2015 (Unaudited)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Alabama 3.8%		
County of Jefferson Alabama, RB, Limited Obligation School, Series A, 5.00%, 1/01/24	\$ 4,550	\$ 4,584,125
County of Jefferson Alabama Sewer, Refunding RB:		
Senior Lien, Series A (AGM), 5.00%, 10/01/44	570	611,781
Senior Lien, Series A (AGM), 5.25%, 10/01/48	1,090	1,189,452
Sub-Lien, Series D, 6.00%, 10/01/42	1,000	1,117,070
Sub-Lien, Series D, 7.00%, 10/01/51	1,545	1,855,359
		9,357,787
Alaska 0.5%		
Northern Tobacco Securitization Corp., Refunding RB, Tobacco Settlement, Asset-Backed, Series A, 5.00%, 6/01/46	1,660	1,265,999
Arizona 2.2%		
County of Maricopa Arizona IDA, RB, Arizona Charter Schools Project, Series A, 6.75%, 7/01/29	715	682,732
Salt Verde Financial Corp., RB, Senior:		
5.00%, 12/01/32	2,000	2,205,920
5.00%, 12/01/37	2,360	2,588,330
		5,476,982
California 12.3%		
California Health Facilities Financing Authority, RB:		
St. Joseph Health System, Series A, 5.75%, 7/01/39	1,530	1,748,805
Sutter Health, Series B, 6.00%, 8/15/42	2,200	2,608,188
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.00%, 7/01/33		
	875	981,759
California Municipal Finance Authority, RB, Senior, Caritas Affordable Housing, Inc. Projects, S/F Housing, Series A:		
5.25%, 8/15/39	105	114,207
5.25%, 8/15/49	265	286,730
	Par (000)	Value
Municipal Bonds		
California (concluded)		
California Pollution Control Financing Authority, RB, Poseidon Resources (Channel Side) LP Desalination Project, AMT, 5.00%, 11/21/45 (a)	\$ 1,025	\$ 1,072,488
California Statewide Communities Development Authority, RB, John Muir Health, Series A, 5.13%, 7/01/39	1,510	1,655,806
City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Series A, 5.25%, 5/15/39	555	624,036
City of Stockton California Public Financing Authority, RB, Delta Water Supply Project, Series A, 6.25%, 10/01/38	255	306,028
Montebello Unified School District, GO, CAB (NPFGC), 0.00%, 8/01/22 (b)	2,405	1,979,531
San Diego Unified School District California, GO, CAB, Election of 2008, Series A, 0.00%, 7/01/29 (b)	3,475	2,091,985
Sequoia Union High School District, GO, Refunding, Election of 2004, Series B (AGM), 5.50%, 7/01/16 (c)	3,490	3,656,648
State of California, GO, Various Purposes, 6.50%, 4/01/33	8,370	9,929,917
State of California Public Works Board, LRB, Various Capital Projects:		
Series I, 5.00%, 11/01/38	550	619,559
Sub-Series I-1, 6.38%, 11/01/34	820	986,657
Tobacco Securitization Authority of Southern California, Refunding RB, Tobacco Settlement, Asset-Backed, Senior Series A-1, 4.75%, 6/01/25	1,520	1,509,649
		30,171,993
Colorado 2.3%		
Colorado Educational & Cultural Facilities Authority, RB, Charter School, Colorado Springs, 5.50%, 7/01/40	1,455	1,544,148

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Colorado (concluded)		
Colorado Health Facilities Authority, Refunding RB, Evangelical Lutheran Good Samaritan Society Project, 5.00%, 12/01/42	\$ 115	\$ 120,758
Regional Transportation District, COP, Refunding, Series A, 5.38%, 6/01/31	710	809,918
Regional Transportation District, RB, Denver Transit Partners Eagle P3 Project, 6.00%, 1/15/34	1,425	1,610,321
University of Colorado, RB, Series A, 5.38%, 6/01/19 (c)	1,250	1,445,513
		5,530,658
Connecticut 1.2%		
Connecticut State Health & Educational Facility Authority, Refunding RB, Wesleyan University, Series G, 5.00%, 7/01/35	2,515	2,848,338
Delaware 1.4%		
County of Sussex Delaware, RB, NRG Energy, Inc., Indian River Power LLC Project, 6.00%, 10/01/40	790	899,344
Delaware State EDA, RB, Exempt Facilities, Indian River Power LLC Project, 5.38%, 10/01/45	2,430	2,628,361
		3,527,705
District of Columbia 3.8%		
District of Columbia, Tax Allocation Bonds, City Market at O Street Project, 5.13%, 6/01/41	1,520	1,605,667
Metropolitan Washington Airports Authority, Refunding RB, Dulles Toll Road: 1st Senior Lien, Series A, 5.00%, 10/01/39	505	551,364
1st Senior Lien, Series A, 5.25%, 10/01/44	1,470	1,639,138
CAB, 2nd Senior Lien, Series B (AGC), 0.00%, 10/01/35 (b)	13,485	5,476,124
		9,272,293
Florida 5.2%		
City of Clearwater Florida Water & Sewer Revenue, RB, Series A, 5.25%, 12/01/39	2,375	2,671,281
Municipal Bonds		
Florida (concluded)		
City of Miami Beach Florida Stormwater Revenue, RB, 4.00%, 9/01/45 (d)	\$ 310	\$ 306,246
County of Broward Florida Water & Sewer Utility, Refunding RB, Series A, 5.25%, 10/01/18 (c)	750	849,727
County of Collier Florida Health Facilities Authority, Refunding RB, Series A, 5.00%, 5/01/45	610	659,325
County of Miami-Dade Florida, RB, CAB, Series A (NPFGC), 0.00%, 10/01/37 (b)	910	283,156
County of Miami-Dade Florida Aviation, Refunding ARB, Miami International Airport, Series A-1, 5.38%, 10/01/41	2,620	2,974,669
Mid-Bay Bridge Authority, RB, Springing Lien, Series A, 7.25%, 10/01/21 (c)	2,095	2,751,720
Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	605	506,815
Village Community Development District No. 10, Special Assessment Bonds, 5.13%, 5/01/43	1,505	1,656,523
		12,659,462
Georgia 1.5%		
County of Gainesville Georgia & Hall Hospital Authority, Refunding RB, Northeast Georgia Health System, Inc. Project, Series A, 5.50%, 8/15/54	370	420,246
DeKalb Private Hospital Authority, Refunding RB, Children's Healthcare, 5.25%, 11/15/39	585	654,825
Metropolitan Atlanta Rapid Transit Authority, RB, Sales Tax, 3rd Indenture, Series A, 5.00%, 7/01/39	2,410	2,694,067
		3,769,138
Hawaii 0.4%		
State of Hawaii Harbor System, RB, Series A, 5.25%, 7/01/30	945	1,068,956

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Illinois 16.5%		
City of Chicago Illinois, GARB, O Hare International Airport, 3rd Lien:		
Series A, 5.75%, 1/01/39	\$ 2,000	\$ 2,293,060
Series C, 6.50%, 1/01/41	4,055	4,871,839
City of Chicago Illinois, GO, Project, 5.00%, 1/01/34	1,720	1,596,676
City of Chicago Illinois, GO, Refunding, Series A:		
Project, 5.25%, 1/01/32	2,195	2,119,953
5.00%, 1/01/35	2,000	1,847,800
City of Chicago Illinois, Refunding RB, Sales Tax, Series A, 5.25%, 1/01/38	570	595,513
City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32	900	903,789
City of Chicago Illinois Board of Education, GO, Series A, 5.25%, 12/01/41	2,200	1,922,536
City of Chicago Illinois Transit Authority, RB, Sales Tax Receipts, 5.25%, 12/01/40	730	768,047
City of Chicago Illinois Waterworks, Refunding RB, 2nd Lien Project, 5.00%, 11/01/42	1,000	1,033,170
County of Cook Illinois Community College District No. 508, GO, City College of Chicago, 5.50%, 12/01/38	560	639,016
Illinois Finance Authority, Refunding RB, Central Dupage Health, Series B, 5.50%, 11/01/39	1,115	1,272,226
Illinois State Toll Highway Authority, RB:		
Senior, Series C, 5.00%, 1/01/36	1,870	2,071,174
Senior, Series C, 5.00%, 1/01/37	2,000	2,206,760
Series A, 5.00%, 1/01/38	1,610	1,768,714
Metropolitan Pier & Exposition Authority, Refunding RB, McCormick Place Expansion Project:		
CAB, Series B (AGM), 0.00%, 6/15/47 (b)	13,220	2,663,698
Series B (AGM), 5.00%, 6/15/50	3,070	3,181,165
Series B-2, 5.00%, 6/15/50	1,740	1,779,115
Railsplitter Tobacco Settlement Authority, RB:		
5.50%, 6/01/23	315	363,847
	Par (000)	Value
Municipal Bonds		
Illinois (concluded)		
Railsplitter Tobacco Settlement Authority, RB (concluded):		
6.00%, 6/01/28	\$ 800	\$ 941,528
State of Illinois, GO:		
5.00%, 2/01/39	1,100	1,105,291
Series A, 5.00%, 4/01/38	2,625	2,639,779
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	440	488,990
University of Illinois, RB, Auxiliary Facilities System, Series A:		
5.00%, 4/01/39	580	632,299
5.00%, 4/01/44	705	763,684
		40,469,669
Indiana 4.2%		
City of Valparaiso Indiana, RB, Exempt Facilities, Pratt Paper LLC Project, AMT:		
6.75%, 1/01/34	560	674,442
7.00%, 1/01/44	1,355	1,640,864
Indiana Finance Authority, RB, Series A:		
CWA Authority Project, 1st Lien, 5.25%, 10/01/38	2,275	2,626,487
Private Activity Bond, Ohio River Bridges East End Crossing Project, AMT, 5.00%, 7/01/44	310	322,939
Private Activity Bond, Ohio River Bridges East End Crossing Project, AMT, 5.00%, 7/01/48	1,030	1,067,204
Sisters of St. Francis Health Services, 5.25%, 11/01/39	585	647,718
Indiana Finance Authority, Refunding RB, Parkview Health System, Series A, 5.75%, 5/01/31	1,300	1,478,776
Indiana Municipal Power Agency, RB, Series B, 6.00%, 1/01/39	775	885,151
Indianapolis Local Public Improvement Bond Bank, RB, Series A, 5.00%, 1/15/40	880	970,807
		10,314,388
Iowa 2.2%		
Iowa Finance Authority, Refunding RB, Midwestern Disaster Area, Iowa Fertilizer Co. Project:		
5.00%, 12/01/19	665	702,559
5.50%, 12/01/22	1,630	1,724,638
5.25%, 12/01/25	320	347,690

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Iowa (concluded)		
Iowa Student Loan Liquidity Corp., Refunding RB, Student Loan, Senior Series A-1, AMT, 5.15%, 12/01/22	\$ 910	\$ 968,668
Iowa Tobacco Settlement Authority, Refunding RB, Asset-Backed, Series C, 5.63%, 6/01/46	1,730	1,508,767
		5,252,322
Kansas 0.7%		
Kansas Development Finance Authority, Refunding RB, Adventist Health, Series C, 5.75%, 11/15/38	1,520	1,733,621
Kentucky 0.6%		
Kentucky Economic Development Finance Authority, RB, Catholic Health Initiatives, Series A, 5.25%, 1/01/45	705	770,509
Kentucky Public Transportation Infrastructure Authority, RB, Downtown Crossing Project, Convertible CAB, 1st Tier, Series C, 0.00%, 7/01/43 (e)	865	602,109
		1,372,618
Louisiana 3.5%		
East Baton Rouge Sewerage Commission, RB, Series A, 5.25%, 2/01/19 (c)	570	650,113
Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Project, 6.75%, 11/01/32	3,500	3,853,255
New Orleans Aviation Board, RB, Passenger Facility Charge, Series A, 5.25%, 1/01/41	430	453,684
Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, Series A:		
5.50%, 5/15/30	700	784,924
5.25%, 5/15/31	600	664,296
5.25%, 5/15/32	765	859,684
5.25%, 5/15/33	830	913,573
		8,566,206
Municipal Bonds		
Louisiana (concluded)		
Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, Series A (concluded): 5.25%, 5/15/35	\$ 350	\$ 386,677
		8,566,206
Maine 0.1%		
Maine Health & Higher Educational Facilities Authority, RB, Series A, 5.00%, 7/01/39	210	229,171
Maryland 1.1%		
Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	300	327,696
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25	530	559,362
Maryland Health & Higher Educational Facilities Authority, Refunding RB, Charlestown Community Project, 6.25%, 1/01/41	1,520	1,685,802
		2,572,860
Massachusetts 1.3%		
Massachusetts Development Finance Agency, Refunding RB:		
Boston University, Series P, 5.45%, 5/15/59	1,165	1,355,175
Covanta Energy Project, Series C, AMT, 5.25%, 11/01/42 (a)	1,575	1,608,689
Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare System, Series J1, 5.00%, 7/01/39	255	284,343
		3,248,207
Michigan 3.0%		
City of Detroit Michigan Sewage Disposal System, Refunding RB, Senior Lien, Series A, 5.25%, 7/01/39	3,085	3,290,924
Kalamazoo Hospital Finance Authority, Refunding RB, Bronson Methodist Hospital, 5.50%, 5/15/36	955	1,061,167

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Michigan (concluded)		
Michigan Finance Authority, Refunding RB, Detroit Water & Sewage Department Project, Senior Lien, Series C-1, 5.00%, 7/01/44	\$ 630	\$ 652,686
State of Michigan Hospital Finance Authority, Refunding RB, Henry Ford Health System, 5.75%, 11/15/39	2,105	2,380,587
		7,385,364
Minnesota 1.0%		
City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32	2,135	2,458,837
Mississippi 0.3%		
University of Southern Mississippi, RB, Campus Facilities Improvements Project, 5.38%, 9/01/36	675	759,746
Missouri 0.2%		
Bi-State Development Agency of the Missouri-Illinois Metropolitan District, Refunding RB, Combined Lien, Series A, 5.00%, 10/01/44	175	192,785
State of Missouri Health & Educational Facilities Authority, Refunding RB, St. Louis College of Pharmacy Project, 5.50%, 5/01/43	175	189,905
		382,690
Nebraska 0.6%		
Central Plains Energy Project Nebraska, RB, Gas Project No. 3, 5.25%, 9/01/37	575	625,962
County of Hall Nebraska School District No. 2, GO, Grand Island Public Schools, 5.00%, 12/15/39	685	772,893
		1,398,855
New Hampshire 1.4%		
New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth-Hitchcock, 6.00%, 8/01/38	3,035	3,485,606
Municipal Bonds		
New Jersey 6.1%		
Casino Reinvestment Development Authority, Refunding RB: 5.25%, 11/01/39	\$ 735	\$ 767,230
5.25%, 11/01/44	575	595,838
New Jersey EDA, RB, Continental Airlines, Inc. Project, AMT: 4.88%, 9/15/19	700	732,431
5.13%, 9/15/23	1,410	1,535,419
5.25%, 9/15/29	1,365	1,482,049
New Jersey EDA, Refunding, Special Assessment Bonds, Kapkowski Road Landfill Project, 5.75%, 4/01/31	1,550	1,785,925
New Jersey State Turnpike Authority, RB, Series A, 5.00%, 1/01/43	1,925	2,119,598
New Jersey Transportation Trust Fund Authority, RB:		
Transportation Program, Series AA, 5.00%, 6/15/44	2,505	2,557,054
Transportation System, Series A, 5.50%, 6/15/41	1,575	1,660,003
Transportation System, Series B, 5.25%, 6/15/36	1,705	1,788,187
		15,023,734
New York 10.2%		
City of New York New York Industrial Development Agency, ARB, British Airways PLC Project, AMT, 7.63%, 12/01/32	1,500	1,522,545
City of New York New York Transitional Finance Authority, RB:		
Fiscal 2012, Sub-Series E-1, 5.00%, 2/01/42	1,560	1,739,119
Future Tax Secured Revenue, Fiscal 2015, Series B, Sub-Series B-1, 5.00%, 8/01/39	1,090	1,228,746
Counties of New York Tobacco Trust IV, Refunding RB, Settlement Pass-Through Turbo, Series A, 6.25%, 6/01/41 (a)	1,300	1,331,200
County of Dutchess New York Industrial Development Agency, Refunding RB, Bard College Civic Facility, 5.00%, 8/01/46	3,510	3,427,304
	245	266,930

Edgar Filing: BLACKROCK MUNIHOLDINGS FUND, INC. - Form N-Q

County of Westchester New York Healthcare Corp., RB, Senior Lien, Series A, 5.00%,
11/01/44

BLACKROCK MUNIHOLDINGS FUND, INC.

JULY 31, 2015

5

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par		Value
	(000)		Value
Municipal Bonds			
New York (concluded)			
Erie Tobacco Asset Securitization Corp., Refunding RB, Asset-Backed, Series A, 5.00%, 6/01/45	\$ 1,650		\$ 1,526,646
Long Island Power Authority, Refunding RB, Electric System, Series A, 5.75%, 4/01/39	1,450		1,629,931
Metropolitan Transportation Authority, RB, Series B, 5.25%, 11/15/38	1,715		1,962,629
Metropolitan Transportation Authority, Refunding RB, Dedicated Tax Fund, Series B, 5.00%, 11/15/34	1,740		1,971,002
New York Liberty Development Corp., Refunding RB:			
2nd Priority, Bank of America Tower at One Bryant Park Project, Class 3, 6.38%, 7/15/49	850		958,401
3 World Trade Center Project, Class 1, 5.00%, 11/15/44 (a)	2,930		2,947,316
3 World Trade Center Project, Class 2, 5.15%, 11/15/34 (a)	245		253,578
3 World Trade Center Project, Class 2, 5.38%, 11/15/40 (a)	605		635,407
Port Authority of New York & New Jersey, ARB, Special Project, JFK International Air Terminal LLC Project, Series 8:			
6.00%, 12/01/36	900		1,047,537
6.00%, 12/01/42	875		1,018,439
Westchester Tobacco Asset Securitization, Refunding RB, 5.13%, 6/01/45	1,700		1,603,848
			25,070,578
North Carolina 0.6%			
North Carolina Medical Care Commission, RB, Health Care Facilities, Duke University Health System, Series A, 5.00%, 6/01/42			
	970		1,080,677
	Par		
Municipal Bonds			
	(000)		Value
North Carolina (concluded)			
North Carolina Medical Care Commission, Refunding RB, 1st Mortgage, Retirement Facilities Whitestone Project, Series A, 7.75%, 3/01/41			
	\$ 415		\$ 475,627
			1,556,304
Ohio 0.5%			
County of Franklin Ohio, RB, Health Care Facilities Improvement, OPRS Communities Obligation Group, Series A, 6.13%, 7/01/40			
	470		514,359
State of Ohio, RB, Portsmouth Bypass Project, AMT, 5.00%, 6/30/53			
	580		611,998
			1,126,357
Oklahoma 0.3%			
County of Epworth Oklahoma Finance Authority, Refunding RB, Epworth Villa Project, Series A, 5.13%, 4/01/42			
	975		826,966
Pennsylvania 3.2%			
City of Philadelphia Pennsylvania Hospitals & Higher Education Facilities Authority, RB, Temple University Health System, Series A, 5.63%, 7/01/42			
	885		926,975
Pennsylvania Economic Development Financing Authority, RB:			
American Water Co. Project, 6.20%, 4/01/39	2,520		2,890,641
Rapid Bridge Replacement Project, AMT, 5.00%, 6/30/42	2,015		2,109,927
Pennsylvania Economic Development Financing Authority, Refunding RB, National Gypson Co., AMT, 5.50%, 11/01/44			
	1,105		1,126,647
Pennsylvania Turnpike Commission, RB, Series A, 5.00%, 12/01/44			
	795		873,268
			7,927,458
Rhode Island 0.8%			
Tobacco Settlement Financing Corp., Refunding RB, Series B, 4.50%, 6/01/45			
	1,900		1,863,178

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
South Carolina 2.3%		
South Carolina State Ports Authority, RB, 5.25%, 7/01/40	\$ 2,285	\$ 2,536,418
State of South Carolina Public Service Authority, RB, Santee Cooper, Series A, 5.50%, 12/01/54	2,790	3,127,367
		5,663,785
Tennessee 1.8%		
City of Chattanooga Tennessee Health Educational & Housing Facility Board, RB, Catholic Health Initiatives, Series A, 5.25%, 1/01/45	980	1,064,466
County of Hardeman Tennessee Correctional Facilities Corp., RB, 7.75%, 8/01/17	1,010	1,009,808
County of Shelby Tennessee Health Educational & Housing Facilities Board, Refunding RB, St. Jude s Childrens Research Hospital, 5.00%, 7/01/31	2,250	2,329,583
		4,403,857
Texas 8.6%		
Central Texas Regional Mobility Authority, Refunding RB:		
Senior Lien, 6.25%, 1/01/46	1,480	1,703,998
Sub-Lien, 5.00%, 1/01/33	250	269,308
Central Texas Turnpike System, Refunding RB, Series C, 5.00%, 8/15/42	425	454,635
City of Austin Texas Airport System, ARB, Revenue, AMT, 5.00%, 11/15/39	440	479,895
City of Austin Texas Electric Utility Revenue, Refunding RB, Series A, 5.00%, 11/15/37	1,500	1,670,100
City of Dallas Texas Waterworks & Sewer System, Refunding RB, 5.00%, 10/01/35	1,050	1,199,289
City of Houston Texas Airport System, Refunding ARB, Senior Lien, Series A, 5.50%, 7/01/39	1,070	1,187,968
County of Harris Texas Cultural Education Facilities Finance Corp., RB, 1st Mortgage, Brazos Presbyterian Homes, Inc. Project, Series B, 7.00%, 1/01/48	325	382,190
	Par	
	(000)	Value
Municipal Bonds		
Texas (concluded)		
County of Harris Texas Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/18 (c)	\$ 1,910	\$ 2,294,884
La Vernia Higher Education Finance Corp., RB, Kipp, Inc., Series A, 6.38%, 8/15/19 (c)	450	539,037
North Texas Tollway Authority, RB, CAB, Special Project System, Series B, 0.00%, 9/01/37 (b)	1,400	498,092
North Texas Tollway Authority, Refunding RB:		
2nd Tier System, Series F, 6.13%, 1/01/16 (c)	4,190	4,292,445
Series A, 5.00%, 1/01/35	830	908,203
Series A, 5.00%, 1/01/38	660	717,281
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien:		
LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40	2,000	2,383,780
NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	1,700	1,992,043
		20,973,148
Vermont 0.0%		
Vermont Educational & Health Buildings Financing Agency, RB, Developmental & Mental Health, Series A, 6.00%, 6/15/17	20	20,369
Virginia 2.8%		
County of Fairfax Virginia EDA, Refunding RB, Goodwin House, Inc., 5.13%, 10/01/42	1,000	1,039,300
County of Hanover Virginia EDA, Refunding RB, Covenant Woods, Series A:		
5.00%, 7/01/42	625	639,269
Residential Care Facility, 5.00%, 7/01/47	970	990,205
Virginia Small Business Financing Authority, RB, Senior Lien, Elizabeth River Crossings OpCo LLC Project, AMT:		
5.25%, 1/01/32	550	597,570

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
Virginia (concluded)		
Virginia Small Business Financing Authority, RB, Senior Lien, Elizabeth River Crossings OpCo LLC Project, AMT (concluded):		
6.00%, 1/01/37	\$ 3,180	\$ 3,632,005
		6,898,349
Washington 1.0%		
Port of Seattle Washington, RB, Series C, AMT, 5.00%, 4/01/40 (d)	540	585,382
Washington Health Care Facilities Authority, RB, Catholic Health Initiatives, Series A, 5.75%, 1/01/45	1,625	1,863,111
		2,448,493
Wisconsin 3.1%		
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	4,980	5,773,712
State of Wisconsin Health & Educational Facilities Authority, RB, Ascension Health Senior Credit Group, Series E, 5.00%, 11/15/33	1,710	1,883,514
		7,657,226
Wyoming 0.1%		
Wyoming Municipal Power Agency, Inc., RB, Series A, 5.00%, 1/01/42	210	223,761
Total Municipal Bonds 112.7%		276,263,034

Municipal Bonds Transferred to**Tender Option Bond Trusts (f)**

California 7.9%		
Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/19 (c)	2,270	2,649,676
California Educational Facilities Authority, RB, University of Southern California, Series B, 5.25%, 10/01/39 (g)	1,845	2,055,274
City & County of San Francisco California Public Utilities Commission, RB, Water Revenue, Series B, 5.00%, 11/01/39	6,600	7,434,702
Municipal Bonds Transferred to	Par	

	(000)	Value
Tender Option Bond Trusts (f)		
California (concluded)		
City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Senior Series A, 5.00%, 5/15/40	\$ 4,122	\$ 4,652,981
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/17 (c)	1,620	1,762,106
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	748	856,276
		19,411,015
Colorado 2.5%		
Colorado Health Facilities Authority, RB, Catholic Health (AGM):		
Series C-3, 5.10%, 10/01/41	2,580	2,722,287
Series C-7, 5.00%, 9/01/36	1,650	1,741,773
Colorado Health Facilities Authority, Refunding RB, Catholic Health Initiatives, Series A, 5.50%, 7/01/34 (g)	1,490	1,685,920
		6,149,980
Connecticut 2.8%		
Connecticut State Health & Educational Facility Authority, RB, Yale University:		
Series T-1, 4.70%, 7/01/29	3,179	3,387,560
Series X-3, 4.85%, 7/01/37	3,262	3,477,472

Edgar Filing: BLACKROCK MUNIHOLDINGS FUND, INC. - Form N-Q

		6,865,032
Florida 1.8%		
County of Miami-Dade Florida, RB, Water & Sewer System, 5.00%, 10/01/34	3,939	4,472,633
Georgia 1.0%		
Private Colleges & Universities Authority, Refunding RB, Emory University, Series C, 5.00%, 9/01/38	2,259	2,480,408
Massachusetts 2.1%		
Massachusetts School Building Authority, RB, Senior, Series B, 5.00%, 10/15/41	4,502	5,077,836

8

BLACKROCK MUNIHOLDINGS FUND, INC.

JULY 31, 2015

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to	Par		
	(000)	Value	
Tender Option Bond Trusts (f)			
New Hampshire 0.7%			
New Hampshire Health & Education Facilities Authority, RB, Dartmouth College, 5.25%, 6/01/39 (g)	\$ 1,409	\$ 1,589,235	
New York 6.6%			
City of New York New York Municipal Water Finance Authority, Refunding RB, Water & Sewer System, 2nd General Resolution, Series FF-2, 5.50%, 6/15/40	1,110	1,269,843	
Hudson Yards Infrastructure Corp., RB, Fiscal 2012, Series A, 5.75%, 2/15/47 (g)	1,110	1,263,832	
New York Liberty Development Corp., RB, 1 World Trade Center Port Authority Consolidated Bonds, 5.25%, 12/15/43	7,440	8,543,575	
New York Liberty Development Corp., Refunding RB, 4 World Trade Center Project, 5.75%, 11/15/51 (g)	4,460	5,141,399	
			16,218,649
North Carolina 0.5%			
North Carolina Capital Facilities Finance Agency, Refunding RB, Wake Forest University, 5.00%, 1/01/38	1,080	1,193,627	
Ohio 4.4%			
State of Ohio, Refunding RB, Cleveland Clinic Health System Obligated Group, Series A, 5.50%, 1/01/39	9,644	10,889,070	
Texas 4.9%			
City of San Antonio Texas Public Service Board, RB, Electric & Gas Systems, Junior Lien, 5.00%, 2/01/43	1,720	1,897,246	
County of Harris Texas, RB, Senior Lien, Toll Road, Series A, 5.00%, 8/15/38 (g)	4,624	5,141,629	
County of Harris Texas Metropolitan Transit Authority, Refunding RB, Series A, 5.00%, 11/01/41	2,350	2,651,176	
Municipal Bonds Transferred to	Par		
Tender Option Bond Trusts (f)			
Texas (concluded)	(000)	Value	
University of Texas, Refunding RB, Financing System, Series B, 5.00%, 8/15/43	\$ 2,040	\$ 2,308,671	
			11,998,722
Utah 1.1%			
City of Riverton Utah, RB, IHC Health Services, Inc., 5.00%, 8/15/41	2,518	2,741,707	
Virginia 2.6%			
University of Virginia, Refunding RB, General, 5.00%, 6/01/40	3,749	4,113,493	
Virginia Small Business Financing Authority, Refunding RB, Sentara Healthcare, 5.00%, 11/01/40	2,095	2,315,764	
			6,429,257
Washington 0.8%			
Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/17 (c)	1,860	2,004,575	
Wisconsin 1.8%			
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health, Inc., Obligated Group, Series C, 5.25%, 4/01/39 (g)	3,959	4,288,573	
Total Municipal Bonds Transferred to			
Tender Option Bond Trusts 41.5%			101,810,319
Total Long-Term Investments			
(Cost \$343,860,170) 154.2%			378,073,353
Short-Term Securities	Shares		
FFI Institutional Tax-Exempt Fund, 0.01% (h)(i)	5,765,069	5,765,069	
Total Short-Term Securities		5,765,069	

Edgar Filing: BLACKROCK MUNIHOLDINGS FUND, INC. - Form N-Q

(Cost \$5,765,069) 2.3%

BLACKROCK MUNIHOLDINGS FUND, INC.

JULY 31, 2015

9

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Value
Total Investments	
(Cost \$349,625,239*) 156.5%	\$ 383,838,422
Other Assets Less Liabilities 0.8%	1,887,429
Liability for TOB Trust Certificates, Including Interest	
Expense and Fees Payable (23.2)%	(56,800,415)
VMTP Shares, at Liquidation Value (34.1)%	(83,700,000)
Net Assets Applicable to Common Shares 100.0%	\$ 245,225,436

Notes to Schedule of Investments

* As of July 31, 2015, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

Tax cost	\$ 293,623,085
Gross unrealized appreciation	\$ 35,408,869
Gross unrealized depreciation	(1,977,232)
Net unrealized appreciation	\$ 33,431,637

- (a) Security exempt from registration pursuant to Rule 144A under the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (b) Zero-coupon bond.
- (c) U.S. Government securities, held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (d) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
Morgan Stanley & Co. LLC	\$ 585,382	\$ 6,928
Wells Fargo Securities, LLC	\$ 306,246	\$ 4,204

- (e) Represents a step-up bond that pays an initial coupon rate for the first period and then a higher coupon rate for the following periods. Rate shown is as of report date.

Edgar Filing: BLACKROCK MUNIHOLDINGS FUND, INC. - Form N-Q

- (f) Represent bonds transferred to a TOB Trust in exchange of cash and residual certificates received by the Fund. These bonds serve as collateral in a secured borrowing.
- (g) All or a portion of security is subject to a recourse agreement, which may require the Fund to pay the liquidity provider in the event there is a shortfall between the TOB Trust Certificates and proceeds received from the sale of the security contributed to the TOB Trust. In the case of a shortfall, the aggregate maximum potential amount the Fund could ultimately be required to pay under the agreement, which expire from October 1, 2016 to February 15, 2031, is \$11,665,091.
- (h) Represents the current yield as of report date.
- (i) During the period ended July 31, 2015, investments in issuers considered to be an affiliate of the Fund for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at April 30, 2015	Net Activity	Shares Held at July 31, 2015	Income
FBI Institutional Tax-Exempt Fund	1,340,347	4,424,722	5,765,069	\$ 254

Portfolio Abbreviations

AGC	Assured Guarantee Corp.
AGM	Assured Guaranty Municipal Corp.
AMT	Alternative Minimum Tax (subject to)
ARB	Airport Revenue Bonds
CAB	Capital Appreciation Bonds
COP	Certificates of Participation
EDA	Economic Development Authority

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

EDC	Economic Development Corp.
GARB	General Airport Revenue Bonds
GO	General Obligation Bonds
IDA	Industrial Development Authority
LRB	Lease Revenue Bonds
NPFGC	National Public Finance Guarantee Corp.
RB	Revenue Bonds
S/F	Single-Family

Financial Futures Contracts

				Notional	Unrealized
Contracts Short	Issue	Exchange	Expiration	Value	Depreciation
(133)	10-Year U.S. Treasury Note	Chicago Board of Trade	September 2015	\$ 16,949,188	\$ (34,510)

Fair Value Hierarchy as of July 31, 2015

Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a fair value hierarchy consisting of three broad levels for financial reporting purposes as follows:

Level 1 unadjusted price quotations in active markets/exchanges for identical assets or liabilities that the Fund has the ability to access

Level 2 other observable inputs (including, but not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including Fund's own assumptions used in determining the fair value of investments and derivative financial instruments)

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The significant unobservable inputs used by the Global Valuation Committee in determining the price for Fair Valued Investments are typically categorized as level 3.

Changes in valuation techniques may result in transfers into or out of an assigned level within the hierarchy. In accordance with the Fund's policy, transfers between different levels of the fair value hierarchy are deemed to have occurred as of the beginning of the reporting period. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investments and derivative financial instruments and is not necessarily an indication of the risks associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and derivative financial instruments, refer to the Fund's most recent financial statements as contained in its annual report.

As of July 31, 2015, the following tables summarize the Fund's investments and derivative financial instruments categorized in the disclosure hierarchy:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments ¹		\$ 378,073,353		\$ 378,073,353

Edgar Filing: BLACKROCK MUNIHOLDINGS FUND, INC. - Form N-Q

Short-Term Securities	\$ 5,765,069		5,765,069
Total	\$ 5,765,069	\$ 378,073,353	\$ 383,838,422

¹ See above Schedule of Investments for values in each state or political sub-division.

BLACKROCK MUNIHOLDINGS FUND, INC.

JULY 31, 2015

11

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments ²				
Liabilities:				
Interest rate contracts	\$ (34,510)			\$ (34,510)

² Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation (depreciation) on the instrument.

The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial reporting purposes. As of July 31, 2015, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash pledged for financial futures contracts	\$ 179,550			\$ 179,550
Liabilities:				
TOB Trust Certificates		\$ (56,783,700)		(56,783,700)
VMTP Shares		(83,700,000)		(83,700,000)
Total	\$ 179,550	\$ (140,483,700)		\$ (140,304,150)

During the period ended July 31, 2015, there were no transfers between levels.

Item 2 Controls and Procedures

- 2(a) The registrant's principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act")) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended.
- 2(b) There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 3 Exhibits

Certifications Attached hereto

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock MuniHoldings Fund, Inc.

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock MuniHoldings Fund, Inc.

Date: September 22, 2015

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock MuniHoldings Fund, Inc.

Date: September 22, 2015

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock MuniHoldings Fund, Inc.

Date: September 22, 2015