

BLACKROCK MUNIHOLDINGS FUND, INC.
Form N-Q
March 25, 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: 04/30/2015

Date of reporting period: 01/31/2015

Item 1 Schedule of Investments

Schedule of Investments January 31, 2015 (Unaudited)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
Alabama 3.7%		
County of Jefferson Alabama, RB, Limited Obligation School, Series A, 5.00%, 1/01/24	\$ 4,550	\$ 4,606,875
County of Jefferson Alabama Sewer, Refunding RB:		
Senior Lien, Series A (AGM), 5.00%, 10/01/44	570	639,586
Senior Lien, Series A (AGM), 5.25%, 10/01/48	1,090	1,237,106
Sub-Lien, Series D, 7.00%, 10/01/51	1,545	1,870,871
County of Jefferson Alabama Sewer Revenue, Refunding RB, Sub-Lien, Series D, 6.00%, 10/01/42	1,000	1,130,700
		9,485,138
Alaska 0.5%		
Northern Tobacco Securitization Corp., Refunding RB, Tobacco Settlement, Asset-Backed, Series A, 5.00%, 6/01/46	1,660	1,360,934
Arizona 2.7%		
County of Maricopa Arizona IDA, RB, Arizona Charter Schools Project, Series A, 6.75%, 7/01/29	1,715	1,646,331
Salt Verde Financial Corp., RB, Senior:		
5.00%, 12/01/32	2,000	2,392,480
5.00%, 12/01/37	2,360	2,850,621
		6,889,432
California 12.6%		
California Health Facilities Financing Authority, RB:		
St. Joseph Health System, Series A, 5.75%, 7/01/39	1,530	1,797,750
Sutter Health, Series B, 6.00%, 8/15/42	2,200	2,664,728
California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.00%, 7/01/33	875	1,035,764
California Municipal Finance Authority, RB, Senior, Caritas Affordable Housing, Inc. Projects, S/F Housing, Series A:		
5.25%, 8/15/39	105	118,794
5.25%, 8/15/49	265	298,098
	Par	
Municipal Bonds (000) Value		
California (concluded)		
California Pollution Control Financing Authority, RB (a):		
County of San Diego California Water Authority Desalination Project Pipeline, 5.00%, 11/21/45	\$ 865	\$ 897,065
Poseidon Resources (Channel Side) LP Desalination Project, AMT, 5.00%, 11/21/45	1,025	1,124,671
California Statewide Communities Development Authority, RB, John Muir Health, Series A, 5.13%, 7/01/39	1,510	1,710,664
City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Series A, 5.25%, 5/15/39	555	640,525
City of Stockton California Public Financing Authority, RB, Delta Water Supply Project, Series A, 6.25%, 10/01/38	255	304,926
Montebello Unified School District, GO, CAB (NPFGC), 0.00%, 8/01/22 (b)	2,405	2,016,953
San Diego Unified School District California, GO, CAB, Election of 2008, Series A, 0.00%, 7/01/29 (b)	3,475	2,195,505
Sequoia Union High School District, GO, Refunding, Election of 2004, Series B, 5.50%, 7/01/16 (c)	3,490	3,749,447
State of California, GO, Various Purposes, 6.50%, 4/01/33	8,370	10,322,470
State of California Public Works Board, LRB, Various Capital Projects:		
Series I, 5.00%, 11/01/38	550	642,400
Sub-Series I-1, 6.38%, 11/01/34	820	1,019,736
Tobacco Securitization Authority of Southern California, Refunding RB, Tobacco Settlement, Asset-Backed, Senior Series A-1, 4.75%, 6/01/25	2,040	2,040,286
		32,579,782
Colorado 2.5%		
Colorado Educational & Cultural Facilities Authority, RB, Charter School, Colorado Springs, 5.50%, 7/01/40	1,455	1,597,474

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	\$ 730	\$ 799,781
Regional Transportation District, COP, Refunding, Series A, 5.38%, 6/01/31	710	831,375
Regional Transportation District, RB, Denver Transit Partners Eagle P3 Project, 6.00%, 1/15/34	1,425	1,648,055
University of Colorado, RB, Series A, 5.38%, 6/01/19 (c)	1,250	1,460,912
		6,337,597
Connecticut 1.1%		
Connecticut State Health & Educational Facility Authority, Refunding RB, Wesleyan University, Series G, 5.00%, 7/01/35	2,515	2,913,980
Delaware 1.4%		
County of Sussex Delaware, RB, NRG Energy, Inc., Indian River Power LLC Project, 6.00%, 10/01/40	790	909,653
Delaware State EDA, RB, Exempt Facilities, Indian River Power LLC Project, 5.38%, 10/01/45	2,430	2,686,025
		3,595,678
District of Columbia 3.7%		
District of Columbia, Tax Allocation Bonds, City Market at O Street Project, 5.13%, 6/01/41	1,520	1,665,540
Metropolitan Washington Airports Authority, Dulles Toll Road, Refunding RB:		
1st Senior Lien, Series A, 5.00%, 10/01/39	505	571,700
1st Senior Lien, Series A, 5.25%, 10/01/44	1,470	1,675,771
CAB, 2nd Senior Lien, Series B (AGC), 0.00%, 10/01/35 (b)	13,485	5,724,113
		9,637,124
Florida 4.6%		
City of Clearwater Florida Water & Sewer Revenue, RB, Series A, 5.25%, 12/01/39	2,375	2,730,799
	Par	
Municipal Bonds		
Florida (concluded)		
County of Broward Florida Water & Sewer Utility, Refunding RB, Series A, 5.25%, 10/01/34	\$ 750	\$ 849,960
County of Miami-Dade Florida, RB, CAB, Series A (NPFGC), 0.00%, 10/01/37 (b)	910	283,529
County of Miami-Dade Florida Aviation, Refunding ARB, Miami International Airport, Series A-1, 5.38%, 10/01/41	2,620	3,046,981
Mid-Bay Bridge Authority, RB, Springing Lien, Series A, 7.25%, 10/01/40	2,095	2,605,091
Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	620	532,797
Village Community Development District No. 10, Special Assessment Bonds, 5.13%, 5/01/43	1,525	1,733,040
		11,782,197
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	442,586
DeKalb Private Hospital Authority, Refunding RB, Children's Healthcare, 5.25%, 11/15/39	585	674,704
Metropolitan Atlanta Rapid Transit Authority, RB, Sales Tax, 3rd Indenture, Series A, 5.00%, 7/01/39	2,410	2,759,402
		3,876,692
Hawaii 0.4%		
State of Hawaii Harbor System, RB, Series A, 5.25%, 7/01/30	945	1,092,798
Illinois 17.7%		
City of Chicago Illinois, GARB, O'Hare International Airport, 3rd Lien:		
Series A, 5.75%, 1/01/39	2,000	2,366,420
Series C, 6.50%, 1/01/41	4,055	4,962,225
City of Chicago Illinois, GO, Project, 5.00%, 1/01/34	2,230	2,351,156
City of Chicago Illinois, GO, Refunding, Series A:		
Project, 5.25%, 1/01/32	2,195	2,395,623

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Illinois (continued)		
City of Chicago Illinois, GO, Refunding, Series A (concluded):		
5.00%, 1/01/35	\$ 2,000	\$ 2,131,740
City of Chicago Illinois, Refunding RB, Sales Tax, Series A, 5.25%, 1/01/38	570	641,997
City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32	900	904,023
City of Chicago Illinois Board of Education, GO, Series A, 5.25%, 12/01/41	3,210	3,433,866
City of Chicago Illinois Transit Authority, RB, Sales Tax Receipts, 5.25%, 12/01/40	730	843,493
City of Chicago Illinois Waterworks, Refunding RB, 2nd Lien Project, 5.00%, 11/01/42	1,000	1,121,940
County of Cook Illinois Community College District No. 508, GO, City College of Chicago, 5.50%, 12/01/38	560	666,019
Illinois Finance Authority, Refunding RB, Central Dupage Health, Series B, 5.50%, 11/01/39	1,115	1,297,113
Illinois State Toll Highway Authority, RB, Senior:		
Series A, 5.00%, 1/01/38	1,610	1,853,818
Series C, 5.00%, 1/01/36	2,340	2,741,100
Series C, 5.00%, 1/01/37	2,000	2,340,940
Metropolitan Pier & Exposition Authority, Refunding RB, McCormick Place Expansion Project:		
CAB, Series B (AGM), 0.00%, 6/15/47 (b)	13,220	3,120,052
Series B (AGM), 5.00%, 6/15/50	3,070	3,310,043
Series B-2, 5.00%, 6/15/50	1,740	1,872,101
Railsplitter Tobacco Settlement Authority, RB:		
5.50%, 6/01/23	315	376,863
6.00%, 6/01/28	800	958,088
State of Illinois, GO:		
5.00%, 2/01/39	1,100	1,191,124
Series A, 5.00%, 4/01/38	2,625	2,827,125
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	440	500,566
University of Illinois, RB, Auxiliary Facilities System, Series A:		
5.00%, 4/01/39	580	669,349
	Par	
	(000)	Value
Municipal Bonds		
Illinois (concluded)		
University of Illinois, RB, Auxiliary Facilities System, Series A (concluded):		
5.00%, 4/01/44	\$ 705	\$ 811,779
		45,688,563
Indiana 4.1%		
City of Valparaiso Indiana, RB, Exempt Facilities, Pratt Paper LLC Project, AMT:		
6.75%, 1/01/34	560	693,633
7.00%, 1/01/44	1,355	1,688,520
Indiana Finance Authority, RB, Series A:		
CWA Authority Project, 1st Lien, 5.25%, 10/01/38	2,275	2,680,291
Private Activity Bond, Ohio River Bridges East End Crossing Project, AMT, 5.00%, 7/01/44	310	339,388
Private Activity Bond, Ohio River Bridges East End Crossing Project, AMT, 5.00%, 7/01/48	1,030	1,126,078
Sisters of St. Francis Health Services, 5.25%, 11/01/39	585	662,536
Indiana Finance Authority, Refunding RB, Parkview Health System, Series A, 5.75%, 5/01/31	1,300	1,489,748
Indiana Municipal Power Agency, RB, Series B, 6.00%, 1/01/39	775	896,047
Indianapolis Local Public Improvement Bond Bank, RB, Series A, 5.00%, 1/15/40	880	1,010,478
		10,586,719
Iowa 2.1%		
Iowa Finance Authority, Refunding RB, Midwestern Disaster Area, Iowa Fertilizer Co. Project:		
5.00%, 12/01/19	665	712,355
5.50%, 12/01/22	1,630	1,733,945
5.25%, 12/01/25	320	353,523
Iowa Student Loan Liquidity Corp., Refunding RB, Student Loan, Senior Series A-1, AMT, 5.15%, 12/01/22	960	1,020,518

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Iowa (concluded)		
Iowa Tobacco Settlement Authority, Refunding RB, Asset-Backed, Series C, 5.63%, 6/01/46	\$ 1,730	\$ 1,564,491
		5,384,832
Kansas 0.7%		
Kansas Development Finance Authority, Refunding RB, Adventist Health, Series C, 5.75%, 11/15/38	1,520	1,801,322
Kentucky 0.6%		
Kentucky Economic Development Finance Authority, RB, Catholic Health Initiatives, Series A, 5.25%, 1/01/45	705	813,373
Kentucky Public Transportation Infrastructure Authority, RB, Downtown Crossing Project, Convertible CAB, 1st Tier, Series C, 0.00%, 7/01/43 (d)	865	641,484
		1,454,857
Louisiana 3.4%		
East Baton Rouge Sewerage Commission, RB, Series A, 5.25%, 2/01/19 (c)	570	668,490
Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Project, 6.75%, 11/01/32	3,500	4,023,320
New Orleans Aviation Board, RB, Passenger Facility Charge, Series A, 5.25%, 1/01/41	430	467,982
Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, Series A: 5.50%, 5/15/30	700	787,227
5.25%, 5/15/31	600	671,922
5.25%, 5/15/32	765	867,036
5.25%, 5/15/33	830	936,671
5.25%, 5/15/35	350	394,940
		8,817,588
Maine 0.1%		
Maine Health & Higher Educational Facilities Authority, RB, Series A, 5.00%, 7/01/39	210	236,998
	Par	
Municipal Bonds		
Maryland 1.2%		
Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	\$ 300	\$ 327,393
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25	820	922,459
Maryland Health & Higher Educational Facilities Authority, Refunding RB, Charlestown Community Project, 6.25%, 1/01/41	1,520	1,752,210
		3,002,062
Massachusetts 2.4%		
Massachusetts Development Finance Agency, Refunding RB:		
Boston University, Series P, 5.45%, 5/15/59	1,165	1,448,934
Covanta Energy Project, Series C, AMT, 5.25%, 11/01/42 (a)	1,575	1,640,347
Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare System, Series J1, 5.00%, 7/01/39	255	291,151
Massachusetts HFA, RB, M/F Housing, Series A, AMT, 5.25%, 12/01/48	2,900	2,910,150
		6,290,582
Michigan 2.9%		
City of Detroit Michigan Sewage Disposal System, Refunding RB, Senior Lien, Series A, 5.25%, 7/01/39	3,085	3,396,894
Kalamazoo Hospital Finance Authority, Refunding RB, Bronson Methodist Hospital, 5.50%, 5/15/36	955	1,100,236
Michigan Finance Authority, Refunding RB, Detroit Water & Sewage Department Project, Senior Lien, Series C-1, 5.00%, 7/01/44	630	681,421

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
Michigan (concluded)		
State of Michigan Hospital Finance Authority, Refunding RB, Henry Ford Health, 5.75%, 11/15/39	\$ 2,105	\$ 2,419,234
		7,597,785
Minnesota 1.0%		
City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32	2,135	2,551,282
Mississippi 0.3%		
University of Southern Mississippi, RB, Campus Facilities Improvements Project, 5.38%, 9/01/36	675	770,519
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	201,400
State of Missouri Health & Educational Facilities Authority, Refunding RB, St. Louis College of Pharmacy Project, 5.50%, 5/01/43	175	198,548
		399,948
Nebraska 1.0%		
Central Plains Energy Project Nebraska, RB, Gas Project No. 3, 5.25%, 9/01/37	575	651,751
County of Hall Nebraska School District No. 2, GO, Grand Island Public Schools, 5.00%, 12/15/39	1,690	1,988,031
		2,639,782
New Hampshire 1.4%		
New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth-Hitchcock, 6.00%, 8/01/38	3,035	3,558,113
New Jersey 5.7%		
New Jersey EDA, RB, Continental Airlines, Inc. Project, AMT: 5.13%, 9/15/23	1,410	1,541,313
5.25%, 9/15/29	1,365	1,478,896
New Jersey EDA, Refunding, Special Assessment Bonds, Kapkowski Road Landfill Project, 5.75%, 4/01/31	1,550	1,848,034
	Par	
Municipal Bonds		
New Jersey (concluded)		
New Jersey State Turnpike Authority, RB, Series A, 5.00%, 1/01/43	\$ 1,925	\$ 2,183,450
New Jersey Transportation Trust Fund Authority, RB:		
Transportation Program, Series AA, 5.00%, 6/15/44	2,505	2,779,748
Transportation System, Series A, 5.50%, 6/15/41	1,575	1,815,692
Transportation System, Series B, 5.25%, 6/15/36	1,705	1,908,185
Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A, 4.50%, 6/01/23	1,215	1,220,492
		14,775,810
New York 9.5%		
City of New York New York Industrial Development Agency, ARB, British Airways PLC Project, AMT, 7.63%, 12/01/32	1,500	1,508,610
City of New York New York Transitional Finance Authority, RB:		
Future Tax Secured Bonds, Fiscal 2012, Sub-Series E-1, 5.00%, 2/01/42	1,560	1,800,443
Future Tax Secured Revenue, Fiscal 2015, Series B-1, 5.00%, 8/01/39	2,090	2,477,068
County of Dutchess New York Industrial Development Agency, Refunding RB, Bard College Civic Facility, 5.00%, 8/01/46	3,800	3,843,586
County of Westchester New York Healthcare Corp., RB, Senior Lien, Series A, 5.00%, 11/01/44	264	303,238
Long Island Power Authority, Refunding RB, Electric System, Series A, 5.75%, 4/01/39	1,450	1,668,036
Metropolitan Transportation Authority, RB, Series B, 5.25%, 11/15/38	1,715	2,055,033
Metropolitan Transportation Authority, Refunding RB, Dedicated Tax Fund, Series B, 5.00%, 11/15/34	1,740	1,994,719
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	971,142

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
New York (concluded)		
New York Liberty Development Corp., Refunding RB (concluded):		
3 World Trade Center Project, Class 1, 5.00%, 11/15/44 (a)	\$ 2,930	\$ 3,133,430
3 World Trade Center Project, Class 2, 5.15%, 11/15/34 (a)	245	274,373
3 World Trade Center Project, Class 2, 5.38%, 11/15/40 (a)	605	682,797
Port Authority of New York & New Jersey, ARB, Special Project, JFK International Air Terminal LLC Project, Series 8:		
6.00%, 12/01/36	900	1,072,728
6.00%, 12/01/42	875	1,040,314
Westchester Tobacco Asset Securitization, Refunding RB, 5.13%, 6/01/45	1,700	1,611,107
		24,436,624
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	1,106,964
North Carolina Medical Care Commission, Refunding RB, 1st Mortgage, Retirement Facilities Whitestone Project, Series A, 7.75%, 3/01/41		
	415	475,395
		1,582,359
Ohio 0.2%		
County of Franklin Ohio, RB, Health Care Facilities Improvement, OPRS Communities Obligation Group, Series A, 6.13%, 7/01/40		
	470	525,559
Oklahoma 0.3%		
County of Epworth Oklahoma Finance Authority, Refunding RB, Epworth Villa Project, Series A, 5.13%, 4/01/42		
	975	784,163
	Par	
	(000)	Value
Municipal Bonds		
Pennsylvania 2.3%		
City of Philadelphia Pennsylvania Hospitals & Higher Education Facilities Authority, RB, Temple University Health System, Series A, 5.63%, 7/01/42		
	\$ 885	\$ 955,862
Pennsylvania Economic Development Financing Authority, RB, American Water Co. Project, 6.20%, 4/01/39		
	2,520	2,970,677
Pennsylvania Economic Development Financing Authority, Refunding RB, National Gypson Co., AMT, 5.50%, 11/01/44		
	1,105	1,143,266
Pennsylvania Turnpike Commission, RB, Series A, 5.00%, 12/01/44		
	795	925,849
		5,995,654
South Carolina 2.3%		
South Carolina State Ports Authority, RB, 5.25%, 7/01/40		
	2,285	2,614,063
State of South Carolina Public Service Authority, RB, Santee Cooper, Series A, 5.50%, 12/01/54		
	2,790	3,329,084
		5,943,147
Tennessee 1.9%		
City of Chattanooga Tennessee Health Educational & Housing Facility Board, RB, Catholic Health Initiatives, Series A, 5.25%, 1/01/45		
	980	1,130,646
County of Hardeman Tennessee Correctional Facilities Corp., RB, 7.75%, 8/01/17		
	1,460	1,460,088
County of Shelby Health Educational & Housing Facilities Board, Refunding RB, St. Jude's Children's Research Hospital, 5.00%, 7/01/31		
	2,250	2,374,222
		4,964,956
Texas 8.6%		
Central Texas Regional Mobility Authority, Refunding RB:		
Senior Lien, 6.25%, 1/01/46	1,480	1,743,455
Sub-Lien, 5.00%, 1/01/33	250	276,100
City of Austin Texas Airport System, RB, AMT, 5.00%, 11/15/39		
	440	508,908

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

	Par		Value
	(000)		Value
Municipal Bonds			
Texas (concluded)			
City of Austin Texas Electric Utility Revenue, Refunding RB, Series A, 5.00%, 11/15/37	\$ 1,500		\$ 1,736,340
City of Dallas Texas Waterworks & Sewer System, Refunding RB, 5.00%, 10/01/35	1,050		1,227,670
City of Houston Texas Airport System, Refunding ARB, Senior Lien, Series A, 5.50%, 7/01/39	1,070		1,217,318
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		380,738
County of Harris Texas Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/18 (c)	1,910		2,370,348
La Vernia Higher Education Finance Corp., RB, Kipp, Inc., Series A, 6.38%, 8/15/44	450		518,157
North Texas Tollway Authority, RB, CAB, Special Project System, Series B, 0.00%, 9/01/37 (b)	1,400		492,212
North Texas Tollway Authority, Refunding RB, 2nd Tier System, Series F, 6.13%, 1/01/16 (c)	4,190		4,415,506
San Antonio Energy Acquisition Public Facility Corp., RB, Gas Supply:			
5.50%, 8/01/24	1,100		1,345,377
5.50%, 8/01/25	1,120		1,380,893
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		2,449,820
NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	1,700		2,039,422
			22,102,264
Vermont 0.2%			
Vermont Educational & Health Buildings Financing Agency, RB, Developmental & Mental Health, Series A, 6.00%, 6/15/17	375		382,447
	Par		
Municipal Bonds			
	(000)		Value
Virginia 2.7%			
County of Fairfax Virginia EDA, Refunding RB, Goodwin House, Inc., 5.13%, 10/01/42	\$ 1,000		\$ 1,043,360
County of Hanover Virginia EDA, Refunding RB, Covenant Woods, Series A:			
5.00%, 7/01/42	625		649,700
Residential Care Facility, 5.00%, 7/01/47	970		1,006,239
Virginia Small Business Financing Authority, RB, Senior Lien, Elizabeth River Crossings OpCo LLC Project, AMT:			
5.25%, 1/01/32	550		608,614
6.00%, 1/01/37	3,180		3,719,423
			7,027,336
Washington 0.8%			
Washington Health Care Facilities Authority, RB, Catholic Health Initiatives, Series A, 5.75%, 1/01/45	1,625		1,960,774
Wisconsin 3.1%			
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	4,980		5,954,486
State of Wisconsin Health & Educational Facilities Authority, RB, Ascension Health Senior Credit Group, Series E, 5.00%, 11/15/33	1,710		1,955,009
			7,909,495
Wyoming 0.1%			
Wyoming Municipal Power Agency, Inc., RB, Series A, 5.00%, 1/01/42	210		232,588
Total Municipal Bonds 112.1%			288,955,480

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

California 7.7%			
Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/44 (c)	2,270		2,715,029
California Educational Facilities Authority, RB, University of Southern California, Series B, 5.25%, 10/01/39 (f)	1,845		2,100,827

BLACKROCK MUNIHOLDINGS FUND, INC.

JANUARY 31, 2015

7

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to	Par	
Tender Option Bond Trusts (e)	(000)	Value
California (concluded)		
City & County of San Francisco California Public Utilities Commission, RB, Water Revenue, Series B, 5.00%, 11/01/39	\$ 6,600	\$ 7,612,968
City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Senior Series A, 5.00%, 5/15/40	4,122	4,745,697
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32	1,620	1,799,577
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	748	873,936
		19,848,034
Colorado 2.4%		
Colorado Health Facilities Authority, RB, Catholic Health (AGM):		
Series C-3, 5.10%, 10/01/41	2,580	2,766,173
Series C-7, 5.00%, 9/01/36	1,650	1,772,149
Colorado Health Facilities Authority, Refunding RB, Catholic Health Initiatives, Series A, 5.50%, 7/01/34 (f)	1,490	1,726,821
		6,265,143
Connecticut 2.7%		
Connecticut State Health & Educational Facility Authority, RB, Yale University:		
Series T-1, 4.70%, 7/01/29	3,179	3,451,780
Series X-3, 4.85%, 7/01/37	3,262	3,539,152
		6,990,932
Florida 1.8%		
County of Miami-Dade Florida, RB, Water & Sewer System, 5.00%, 10/01/34	3,939	4,576,097
Georgia 1.0%		
Private Colleges & Universities Authority, Refunding RB, Emory University, Series C, 5.00%, 9/01/38	2,259	2,536,614
Massachusetts 2.0%		
Massachusetts School Building Authority, RB, Senior, Series B, 5.00%, 10/15/41	4,502	5,276,826
Municipal Bonds Transferred to		
Tender Option Bond Trusts (e)	(000)	Value
New Hampshire 0.6%		
New Hampshire Health & Education Facilities Authority, RB, Dartmouth College, 5.25%, 6/01/39 (f)	\$ 1,409	\$ 1,630,087
New York 6.5%		
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	1,301,168
Hudson Yards Infrastructure Corp., RB, Fiscal 2012, Series A, 5.75%, 2/15/47 (f)	1,110	1,304,935
New York Liberty Development Corp., RB, 1 World Trade Center Port Authority Consolidated, 5.25%, 12/15/43	7,440	8,755,615
New York Liberty Development Corp., Refunding RB, 4 World Trade Center Project, 5.75%, 11/15/51 (f)	4,460	5,323,188
		16,684,906
North Carolina 0.5%		
North Carolina Capital Facilities Finance Agency, Refunding RB, Wake Forest University, 5.00%, 1/01/38	1,080	1,224,234
Ohio 4.3%		
State of Ohio, Refunding RB, Cleveland Clinic Health System Obligated Group, Series A, 5.50%, 1/01/39	9,644	10,991,757
Texas 4.8%		
City of San Antonio Texas Public Service Board, RB, Electric & Gas Systems, Junior Lien, 5.00%, 2/01/43	1,720	1,984,278
County of Harris Texas, RB, Senior Lien, Toll Road, Series A, 5.00%, 8/15/38 (f)	4,624	5,259,347
County of Harris Texas Metropolitan Transit Authority, Refunding RB, Series A, 5.00%, 11/01/41	2,350	2,733,731

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to	Par	Value
Tender Option Bond Trusts (e)	(000)	Value
Texas (concluded)		
University of Texas, Refunding RB, Financing System, Series B, 5.00%, 8/15/43	\$ 2,040	\$ 2,387,490
		12,364,846
Utah 1.1%		
City of Riverton Utah, RB, IHC Health Services, Inc., 5.00%, 8/15/41	2,518	2,833,284
Virginia 2.5%		
University of Virginia, Refunding RB, General, 5.00%, 6/01/40	3,749	4,208,955
Virginia Small Business Financing Authority, Refunding RB, Sentara Healthcare, 5.00%, 11/01/40	2,095	2,383,913
		6,592,868
Washington 0.8%		
Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32	1,860	2,045,607
Wisconsin 1.7%		
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health, Inc., Obligated Group, Series C, 5.25%, 4/01/39 (f)	3,959	4,425,391
		Value
Total Municipal Bonds Transferred to		
Tender Option Bond Trusts 40.4%		\$ 104,286,626
Total Long-Term Investments		
(Cost \$345,931,417) 152.5%		393,242,106
Short-Term Securities		
	Shares	Value
FFI Institutional Tax-Exempt Fund, 0.03% (g)(h)	4,060,198	4,060,198
Total Short-Term Securities		
(Cost \$4,060,198) 1.6%		4,060,198
Total Investments		
(Cost \$349,991,615*) 154.1%		397,302,304
Other Assets Less Liabilities 0.4%		955,536
Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (22.0%)		(56,794,889)
VMTP Shares, at Liquidation Value (32.5%)		(83,700,000)
Net Assets Applicable to Common Shares 100.0%		\$ 257,762,951

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

Tax cost	\$ 293,850,671
Gross unrealized appreciation	\$ 47,650,335
Gross unrealized depreciation	(982,402)
Net unrealized appreciation	\$ 46,667,933

Notes to Schedule of Investments

- (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) 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.
- (e) Represent bonds transferred to a TOB. In exchange for which the Fund received cash and residual interest certificates. These bonds serve as collateral in a financing transaction.
- (f) 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.
- (g) During the period ended January 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:

BLACKROCK MUNIHOLDINGS FUND, INC.

JANUARY 31, 2015

9

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

Affiliate	Shares Held at April 30, 2014	Net Activity	Shares Held at January 31, 2015	Income
FFI Institutional Tax-Exempt Fund	804,766	3,255,432	4,060,198	\$ 1,073

(h) Represents the current yield as of report date.

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
GARB	General Airport Revenue Bonds
GO	General Obligation Bonds
HFA	Housing Finance Agency
IDA	Industrial Development Authority
LRB	Lease Revenue Bonds
M/F	Multi-Family
NPFGC	National Public Finance Guarantee Corp.
RB	Revenue Bonds
S/F	Single-Family

As of January 31, 2015, financial futures contracts outstanding were as follows:

Contracts Short	Issue	Exchange	Expiration	Notional Value	Unrealized Depreciation
(315)	10-Year U.S. Treasury Note	Chicago Board of Trade	March 2015	\$ 41,225,625	\$ (1,081,986)

10 BLACKROCK MUNIHOLDINGS FUND, INC. JANUARY 31, 2015

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial reporting purposes. 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 categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and is not necessarily an indication of the risks associated with investing in those securities. The three levels of the fair value hierarchy are as follows:

Level 1 unadjusted quoted prices 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 the Fund's own assumptions used in determining the fair value of investments and derivative financial instruments)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund's policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. For information about the Fund's policy regarding valuation of investments and derivative financial instruments, please refer to the Fund's most recent financial statements as contained in its semi-annual report.

As of January 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		\$ 393,242,106		\$ 393,242,106
Short-Term Securities	\$ 4,060,198			4,060,198
Total	\$ 4,060,198	\$ 393,242,106		\$ 397,302,304

¹ See above Schedule of Investments for values in each state or political subdivision.

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments ²				
Liabilities:				
Interest rate contracts	\$ (1,081,986)			\$ (1,081,986)

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

Schedule of Investments (concluded)

BlackRock MuniHoldings Fund, Inc. (MHD)

The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial reporting purposes. As of January 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	\$ 428,000			\$ 428,000
Liabilities:				
TOB trust certificates		\$ (56,783,700)		(56,783,700)
VMTP Shares		(83,700,000)		(83,700,000)
Total	\$ 428,000	\$ (140,483,700)		\$ (140,055,700)

During the period ended January 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: March 25, 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: March 25, 2015

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

Date: March 25, 2015