

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

Form N-Q

September 27, 2017

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: 811-21348

Name of Fund: BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock Muni Intermediate Duration 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: 04/30/2018

Date of reporting period: 07/31/2017

Item 1 Schedule of Investments

Schedule of Investments July 31, 2017 (Unaudited)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Alabama 2.9%		
City of Birmingham Alabama Special Care Facilities Financing Authority, RB, Children's Hospital (AGC), 6.00%, 6/01/19 (a)	\$ 4,615	\$ 5,032,796
County of Jefferson Alabama, RB, Limited Obligation School, Series A: 5.50%, 1/01/21	5,500	5,510,120
5.25%, 1/01/23	6,500	6,511,310
		17,054,226
Arizona 3.6%		
Arizona Board of Regents, University of Arizona, RB, 5.00%, 8/01/28	2,000	2,272,720
Arizona Health Facilities Authority, Refunding RB, Phoenix Children's Hospital, Series A, 5.00%, 2/01/30	2,685	2,908,983
Arizona Industrial Development Authority, RB, Academies of Math & Science Projects, Series B, 4.25%, 7/01/27 (b)	590	588,802
Arizona State University, RB, Series D, 5.00%, 7/01/32	1,350	1,577,286
City of Phoenix Arizona IDA, RB, Facility, Legacy Traditional Schools Project, Series A, 5.75%, 7/01/24 (b)	750	834,818
City of Tucson Arizona, COP, Refunding (AGC), 4.00%, 7/01/20	2,325	2,504,769
County of Pinal Arizona Electric District No. 3, Refunding RB, 5.00%, 7/01/21 (a)	1,600	1,836,560
Glendale Union School District No. 205, GO, Series C: 5.00%, 7/01/24	1,945	2,288,059
5.00%, 7/01/27	500	573,980
Phoenix-Mesa Gateway Airport Authority, RB, Mesa Project, AMT: 5.00%, 7/01/27	700	779,282
5.00%, 7/01/32	1,925	2,106,181
Scottsdale IDA, Refunding RB, Scottsdale Healthcare, Series C (AGM), 5.00%, 9/01/35	2,050	2,208,096
	Par (000)	Value
Municipal Bonds		
Arizona (continued)		
State of Arizona, COP, Department of Administration, Series A (AGM), 4.25%, 10/01/23	\$ 1,000	\$ 1,058,230
		21,537,766
Arkansas 0.9%		
City of Benton Arkansas, RB, 5.00%, 6/01/29	1,055	1,220,487
University of Arkansas, Refunding RB: 5.00%, 3/01/31	2,315	2,703,781
5.00%, 3/01/34	1,270	1,466,241
		5,390,509
California 6.3%		
California Health Facilities Financing Authority, RB, Sutter Health, Series B, 5.00%, 8/15/22	2,135	2,390,517
California Health Facilities Financing Authority, Refunding RB, 5.00%, 11/15/29	1,930	2,296,912
California Infrastructure & Economic Development Bank, Refunding RB, 4.00%, 11/01/31	1,335	1,434,952
California Pollution Control Financing Authority, RB, Mandatory Put Bonds, Republic Services, Inc. Project, Series B, AMT, 5.25%, 6/01/23 (c)	605	612,048
City of Los Angeles Department of Airports, RB, Subordinate, Series A, AMT: 5.00%, 5/15/30	2,500	2,983,375
5.00%, 5/15/31	3,450	4,079,591
City of San Jose California, Refunding ARB, AMT: Norman Y Mineta San Jose International Airport SJC, Series A, 5.00%, 3/01/30	500	595,605
Series A-1, 5.00%, 3/01/25	2,000	2,223,700
City of San Jose California, Refunding RB, Norman Y Mineta San Jose International Airport SJC, AMT, Series A, 5.00%, 3/01/29	1,250	1,503,038
County of San Diego Regional Airport Authority, RB, Subordinate, Series B, AMT (d): 5.00%, 7/01/30	1,000	1,191,630
5.00%, 7/01/31	1,275	1,498,163
Golden State Tobacco Securitization Corp., Refunding RB, Series A-1, 5.00%, 6/01/26	5,000	5,979,000

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2017

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Par (000)	Value
Municipal Bonds		
California (continued)		
San Marcos Schools Financing Authority, Refunding RB:		
5.00%, 8/15/29	\$ 760	\$ 910,328
5.00%, 8/15/30	800	951,464
State of California, GO:		
5.50%, 4/01/28	15	15,052
Various Purposes, 5.00%, 11/01/17 (a)	105	106,097
Various Purposes, 5.75%, 4/01/31	7,000	7,549,990
Various Purposes, 5.00%, 11/01/32	660	666,448
		36,987,910
Colorado 1.0%		
Denver Urban Renewal Authority, Refunding, Tax Allocation Bond, Stapleton, Senior-Series A-1,		
5.00%, 12/01/23	2,500	2,902,375
Park Creek Metropolitan District, Refunding, Tax Allocation Bonds, 5.00%, 12/01/34	500	551,880
University of Northern Colorado, Refunding RB, Series A, 5.00%, 6/01/31	2,000	2,300,020
		5,754,275
Connecticut 2.6%		
Connecticut State Health & Educational Facility Authority, Refunding RB, Lawrence & Memorial		
Hospital, Series F, 5.00%, 7/01/31	4,530	4,904,178
University of Connecticut, RB, Series A:		
5.00%, 3/15/28	5,000	5,911,150
5.00%, 3/15/32	4,000	4,597,120
		15,412,448
District of Columbia 0.2%		
Ingleside Rock Creek Project, Series A, 4.13%, 7/01/27	1,000	993,940
Florida 7.2%		
County of Broward Florida School Board, COP, Refunding, Series A (AGM), 5.00%, 7/01/24	10,000	11,355,000
County of Lee Florida, Refunding ARB, Series A, AMT (AGM), 5.00%, 10/01/27	1,635	1,835,892
County of Lee Florida, Refunding RB, Series A, AMT, 5.50%, 10/01/23	1,000	1,150,680
	Par (000)	Value
Municipal Bonds		
Florida (continued)		
County of Miami-Dade Florida, RB, AMT, Series B:		
6.00%, 10/01/28	\$ 3,470	\$ 4,141,341
6.00%, 10/01/29	3,480	4,136,363
County of Miami-Dade Florida Educational Facilities Authority, Refunding RB, Series A, 5.00%,		
4/01/32	5,020	5,725,009
County of Miami-Dade Florida Transit System Sales Surtax Revenue, Refunding RB, 5.00%, 7/01/32	1,500	1,711,230
County of Miami-Dade Florida Water & Sewer System Revenue, Refunding RB, Series C (BHAC),		
5.00%, 10/01/18 (a)	8,000	8,376,800
Lakewood Ranch Stewardship District, Special Assessment Bonds:		
Del Webb Project, 3.65%, 5/01/22 (b)	640	646,656
Del Webb Project, 4.30%, 5/01/27 (b)	520	527,426
Lakewood National and Polo Run Projects, 4.00%, 5/01/22	1,500	1,525,260
Midtown Miami Community Development District, Refunding, Special Assessment Bonds, Series A,		
4.25%, 5/01/24	1,485	1,583,841
Sterling Hill Community Development District, Refunding, Special Assessment Bonds, Series B,		
5.50%, 11/01/10 (e)(f)	143	104,850
		42,820,348
Georgia 2.7%		
City of Atlanta Georgia Water & Wastewater Revenue, Refunding RB, 5.00%, 11/01/32	10,315	12,153,030
County of Cobb Kennestone Hospital Authority, Refunding RB, Revenue Anticipation		
Certificates (d):		
5.00%, 4/01/31	800	928,928
5.00%, 4/01/32	1,250	1,444,662

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Par (000)	Value
Municipal Bonds		
Georgia (continued)		
County of Fulton Development Authority, RB, Revenue Anticipation Certificates, Series A, 5.00%, 4/01/32 (d)	\$ 1,000	\$ 1,155,730
		15,682,350
Hawaii 0.9%		
State of Hawaii Airports System, Refunding ARB, Series A, 5.25%, 7/01/29	5,000	5,560,350
Illinois 14.4%		
City of Chicago Illinois Midway International Airport, Refunding ARB, 2nd Lien, Series A: 5.00%, 1/01/32	5,000	5,561,100
AMT, 5.50%, 1/01/32	1,500	1,696,560
City of Chicago Illinois O Hare International Airport, Refunding GARB, AMT, Series C: 5.25%, 1/01/28	1,350	1,534,747
5.25%, 1/01/29	3,020	3,418,580
City of Chicago Illinois O Hare International Airport, RB, Refunding GARB, 5.00%, 1/01/32	3,745	4,309,484
City of Chicago Illinois O Hare International Airport, Refunding GARB, Senior Lien, Series A, AMT, 5.00%, 1/01/23	13,000	15,093,910
City of Chicago Illinois Transit Authority, RB, 5.25%, 12/01/31	3,700	4,029,485
Madison-Macoupin Etc. Counties Community College District No. 536, GO, Refunding, Lewis & Clark Community College: 5.00%, 5/01/30	475	507,661
5.00%, 5/01/31	500	534,380
5.00%, 5/01/32	500	533,005
Railsplitter Tobacco Settlement Authority, RB: 5.50%, 6/01/23	3,500	3,988,110
6.25%, 6/01/24	11,750	11,988,877
State of Illinois, GO: 5.25%, 2/01/30	5,000	5,345,800
5.00%, 5/01/30	10,000	10,527,500
State of Illinois Toll Highway Authority, RB, Series A, 5.00%, 1/01/34	9,140	10,251,241
	Par (000)	Value
Municipal Bonds		
Illinois (continued)		
State of Illinois Toll Highway Authority, Refunding RB, Senior Series A, 5.00%, 12/01/31	\$ 5,220	\$ 6,016,520
		85,336,960
Indiana 5.1%		
City of Whiting Indiana, RB, BP Products North America, Inc. Project, 5.25%, 1/01/21	4,800	5,368,320
County of Jasper Indiana, Refunding RB, Northern Indiana Public Service Co., Series C (NPFGC), 5.85%, 4/01/19	2,000	2,130,720
Indiana Finance Authority, RB, Wastewater, 1st Lien, Series A, 5.25%, 10/01/31	10,000	11,540,700
Indiana Finance Authority, Refunding RB, US Steel Corp. Project, 6.00%, 12/01/19	5,000	5,162,550
Indiana Municipal Power Agency, Refunding RB, Series A, 5.00%, 1/01/33	5,000	5,845,350
		30,047,640
Iowa 1.1%		
Iowa Higher Education Loan Authority, RB, Private College Facility: 5.25%, 4/01/23	695	791,501
5.25%, 4/01/24	730	830,236
5.25%, 4/01/25	520	590,606
5.25%, 4/01/26	360	408,190
Iowa Higher Education Loan Authority, Refunding RB, Private College Facility: 5.00%, 9/01/20 (a)	2,315	2,589,952
Upper Iowa University Project, 5.00%, 9/01/20 (g)	1,000	1,090,280
		6,300,765
Kansas 1.4%		
Kansas Development Finance Authority, Refunding RB, Adventist Health System/Sunbelt Obligated Group, Series C, 5.00%, 11/15/23	1,500	1,627,800
Seward County Unified School District No. 480 Liberal, GO, Refunding:		

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5.00%, 9/01/33

1,005

1,170,282

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Par (000)	Value
Municipal Bonds		
Kansas (continued)		
Seward County Unified School District No. 480 Liberal, GO, Refunding (continued): 5.00%, 9/01/33	\$ 4,995	\$ 5,585,010
		8,383,092
Kentucky 0.5%		
County of Louisville/Jefferson Metropolitan Government, Refunding RB, Catholic Health Initiatives, Series A, 5.00%, 12/01/31	2,750	2,921,765
Louisiana 3.7%		
City of Bossier City Louisiana Utilities, Refunding RB, 5.00%, 10/01/32	2,000	2,310,520
City of New Orleans Louisiana Aviation Board, Refunding GARB, Restructuring, Series A-2 (AGC), 6.00%, 1/01/19 (a)	850	910,257
Louisiana Local Government Environmental Facilities & Community Development Authority, Refunding RB, BRCC Facilities Corp. Project: 5.00%, 12/01/27	3,445	3,894,262
5.00%, 12/01/28	3,715	4,199,473
New Orleans Aviation Board, RB: General Airport, North Terminal Project, Series B, AMT, 5.00%, 1/01/32	800	931,816
Series A, 5.00%, 1/01/32	1,000	1,152,900
Series A, 5.00%, 1/01/33	1,000	1,148,560
State of Louisiana Gasoline & Fuels Tax Revenue, Refunding RB, 4.00%, 5/01/34	3,000	3,183,690
Terrebonne Levee & Conservation District, RB, Sales Tax, 5.00%, 7/01/28	3,660	4,091,917
		21,823,395
Maine 0.3%		
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34	1,965	1,967,535
Maryland 0.8%		
Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20	1,375	1,455,080
	Par (000)	Value
Municipal Bonds		
Maryland (continued)		
Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33	\$ 1,140	\$ 1,289,101
Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33	1,500	1,683,105
		4,427,286
Massachusetts 1.7%		
Massachusetts Development Finance Agency, Refunding RB: Emerson College, 5.00%, 1/01/31	1,730	1,935,316
Suffolk University, 5.00%, 7/01/29	2,700	3,147,606
Suffolk University, 5.00%, 7/01/30	3,125	3,618,406
Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, 5.00%, 7/01/25	1,060	1,155,644
		9,856,972
Michigan 3.1%		
Manistee Area Public Schools, GO, Refunding (Q-SBLF), 5.00%, 5/01/25	1,000	1,121,570
Michigan Finance Authority, Refunding RB, Senior Lien, Detroit Water and Sewer, Series C-3 (AGM), 5.00%, 7/01/31	4,000	4,566,000
Michigan State Building Authority, Refunding RB, Facilities Program, Series II-A, 5.00%, 10/15/24	2,500	2,841,800
Michigan State Hospital Finance Authority, Refunding RB, Henry Ford Health System, 5.25%, 11/15/19 (a)	4,900	5,365,647
State of Michigan, Refunding RB, Grant Anticipation, 5.00%, 3/15/25	3,750	4,572,975
		18,467,992
Minnesota 1.2%		
City of Minneapolis, RB, YMCA of the Greater Twin Cities Project: 4.00%, 6/01/30	150	160,299
4.00%, 6/01/31	50	53,055

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Par (000)	Value
Municipal Bonds		
Minnesota (continued)		
County of St. Paul Minnesota Housing & Redevelopment Authority, RB, Great River School Project, Series A, 4.75%, 7/01/29 (b)(d)	\$ 250	\$ 252,947
University of Minnesota, RB, Biomedical Science Research Facilities Funding Program:		
Series B, 5.00%, 8/01/36	1,000	1,122,050
Series C, 5.00%, 8/01/27	1,390	1,639,380
Series C, 5.00%, 8/01/28	740	870,344
Series C, 5.00%, 8/01/29	1,555	1,822,242
Series C, 5.00%, 8/01/30	835	974,044
		6,894,361
Missouri 0.6%		
Health & Educational Facilities Authority of the State of Missouri, Refunding RB, Webster University Project, 5.00%, 4/01/27	3,155	3,749,528
Montana 0.1%		
County of Yellowstone Montana School District No. 2 Billings, GO, 5.00%, 6/15/30	500	580,395
Nebraska 1.1%		
County of Douglas Nebraska Hospital Authority No. 3, Refunding RB, 5.00%, 11/01/30	800	921,704
County of Lancaster Nebraska Hospital Authority No. 1, Refunding RB, Immanuel Obligation Group, 5.50%, 1/01/30	1,000	1,084,620
Nebraska Public Power District, Refunding RB:		
Series A, 5.00%, 1/01/30	1,000	1,137,090
Series A, 5.00%, 1/01/32	2,000	2,265,060
Series A-1, 3.00%, 1/01/33	900	881,442
		6,289,916
Nevada 1.7%		
County of Clark Nevada Department of Aviation, Refunding RB, 5.00%, 7/01/33	5,000	5,680,500
	Par (000)	Value
Municipal Bonds		
Nevada (continued)		
County of Humboldt Nevada, Refunding RB, Idaho Power Co. Project, 5.15%, 12/01/24	\$ 3,800	\$ 4,076,982
		9,757,482
New Jersey 23.4%		
County of Essex New Jersey Improvement Authority, LRB, Newark Project, Series A (AGM), 5.00%, 11/01/20	2,000	2,157,460
New Jersey EDA, RB, AMT:		
Continental Airlines, Inc. Project, 5.13%, 9/15/23	6,040	6,532,743
Goethals Bridge Replacement Project, Private Activity Bond, 5.50%, 1/01/26	1,500	1,714,545
Goethals Bridge Replacement Project, Private Activity Bond, 5.50%, 1/01/27	1,000	1,139,900
New Jersey EDA, Refunding RB:		
New Jersey American Water Co., Series E, AMT, 4.70%, 12/01/25	3,000	3,255,660
School Facilities Construction, Series AA, 4.25%, 12/15/24	3,850	3,891,773
School Facilities Construction, Series EE, 5.00%, 9/01/23	3,465	3,658,035
New Jersey Educational Facilities Authority, RB, Higher Education Facilities Trust Fund, 5.00%, 6/15/28	10,000	10,516,600
New Jersey Educational Facilities Authority, Refunding RB, 5.00%, 7/01/30	5,000	5,717,000
New Jersey Health Care Facilities Financing Authority, Refunding RB, St. Joseph Health System Obligated Group Issue, 5.00%, 7/01/30	1,595	1,783,992
New Jersey Higher Education Student Assistance Authority, Refunding RB:		
Series 1, AMT, 5.50%, 12/01/26	1,040	1,141,275
Student Loan, Series 1A, 4.75%, 12/01/21	1,370	1,459,077
New Jersey State Turnpike Authority, RB, Series E, 5.00%, 1/01/32	12,000	13,852,320
New Jersey State Turnpike Authority, Refunding RB, Series B, 5.00%, 1/01/29	10,000	11,482,800

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Par (000)	Value
Municipal Bonds		
New Jersey (continued)		
New Jersey Transportation Trust Fund Authority, RB:		
Federal Highway Reimbursement Revenue Notes, Series A, 5.00%, 6/15/30	\$ 2,000	\$ 2,146,100
Federal Highway Reimbursement Revenue Notes, Series A-2, 5.00%, 6/15/30	10,000	10,202,700
Series B, 5.25%, 6/15/26	3,500	3,706,850
Transportation Program, Series AA, 5.25%, 6/15/31	12,000	12,751,800
Transportation Program, Series AA, 5.25%, 6/15/32	2,250	2,406,870
Transportation System, Series A, 5.25%, 6/15/24	3,185	3,398,140
Transportation System, Series B, 5.50%, 6/15/31	13,970	14,657,883
Transportation System, Series C, 5.25%, 6/15/32	10,000	10,698,600
Newark Housing Authority, RB, Series A:		
5.00%, 12/01/23	1,230	1,428,571
5.00%, 12/01/25	1,345	1,540,913
South Jersey Port Corp., RB, Marine Terminal, Series O-1 (AGC), 4.63%, 1/01/19 (a)	1,375	1,447,325
State of New Jersey, GO, Various Purposes, 5.00%, 6/01/28	5,000	5,674,300
		138,363,232
New Mexico 1.2%		
Albuquerque Municipal School District No. 12, GO, Series 2017, 5.00%, 8/01/30	1,250	1,505,212
County of Albuquerque Bernalillo New Mexico Water Utility Authority, Refunding RB, 4.00%, 7/01/33	2,510	2,696,644
New Mexico Hospital Equipment Loan Council, Refunding RB, 5.00%, 8/01/31	2,500	2,901,475
		7,103,331
New York 18.0%		
Brooklyn Arena Local Development Corp., Refunding RB, Barclays Center Project, Series A, 5.00%, 7/15/30	500	579,700
Build NYC Resource Corp., Refunding RB, New York Law School Project, 5.00%, 7/01/33	3,085	3,424,504
Municipal Bonds		
New York (continued)		
City of New York New York, GO, Refunding, Series A, 5.00%, 8/01/29	\$ 6,125	\$ 7,356,492
City of New York New York, GO:		
Sub-Series B-1, 5.25%, 9/01/22	4,250	4,451,492
Sub-Series I-1, 5.50%, 4/01/21	5,000	5,381,300
Sub-Series-D-1, 5.13%, 12/01/17 (a)	10	10,143
Sub-Series-D-1, 5.13%, 12/01/26	1,875	1,901,700
City of New York New York Transitional Finance Authority, BARB, Fiscal 2009, Series S-3, 5.00%, 1/15/23	3,560	3,765,092
Counties of Buffalo & Erie New York Industrial Land Development Corp., Refunding RB, The Charter School for Applied Technologies Project, Series A:		
4.00%, 6/01/22	1,000	1,050,170
4.50%, 6/01/27	1,710	1,851,160
5.00%, 6/01/35	415	448,445
County of Monroe New York Industrial Development Corp., Refunding RB, Series A, 5.00%, 7/01/29	5,695	6,659,448
County of Nassau New York, GO, Series A, 5.00%, 1/01/33	3,110	3,592,050
County of Westchester New York Healthcare Corp., Refunding RB, Senior Lien, Remarketing, Series A:		
5.00%, 11/01/24	5,470	6,145,490
5.00%, 11/01/30	655	713,426
Long Island Power Authority, Refunding RB, Electric System, Series A, 5.50%, 4/01/19 (a)	1,000	1,074,960
Metropolitan Transportation Authority, RB (a):		
Sub-Series B-1, 5.00%, 11/15/21	2,300	2,675,015
Sub-Series B-4, 5.00%, 11/15/21	1,500	1,744,575
New York City Trust for Cultural Resources, Refunding RB, Carnegie Hall, Series A, 5.00%, 12/01/29	2,750	2,982,842
New York State Dormitory Authority, RB, North Shore-Long Island Jewish Health System, Series A, 5.50%, 5/01/19 (a)	1,495	1,611,849

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Par (000)	Value
Municipal Bonds		
New York (continued)		
New York State Dormitory Authority, Refunding RB:		
4.25%, 9/01/19 (a)	\$ 480	\$ 511,978
5.00%, 7/01/30	1,555	1,835,693
New York State Thruway Authority, RB, Junior Lien, Series A, 5.00%, 1/01/33	4,500	5,226,660
Port Authority of New York & New Jersey, ARB, JFK International Air Terminal LLC Project, Series 8, 5.00%, 12/01/20	2,475	2,712,798
Port Authority of New York & New Jersey, Refunding ARB, Consolidated, 152nd Series, AMT, 5.00%, 11/01/23	1,000	1,030,230
Port Authority of New York & New Jersey, Refunding RB, 5.00%, 11/01/28	4,185	5,052,550
State of New York Dormitory Authority, RB:		
5.00%, 3/15/30	2,995	3,648,659
Fordham University, Series A, 5.25%, 7/01/25	900	1,021,284
Icahn School of Medicine at Mount Sinai, Series A, 5.00%, 7/01/32	9,000	10,287,090
Mental Health Services (AGM), 5.00%, 8/15/18 (a)	10	10,428
Mental Health Services (AGM), 5.00%, 8/15/18 (a)	30	31,283
Mental Health Services (AGM), 5.00%, 2/15/22	325	338,871
Mental Health Services, 2nd Series (AGM), 5.00%, 8/15/18 (a)	10	10,428
Municipal Health Facilities Lease, Sub-Series 2-4, 5.00%, 1/15/27	6,900	7,026,891
New York University Hospitals Center, Series A, 5.00%, 7/01/20 (a)	1,725	1,917,562
New York University Hospitals Center, Series A, 5.13%, 7/01/20 (a)	1,670	1,862,401
State of New York Dormitory Authority, Refunding RB:		
North Shore-Long Island Jewish Obligated Group, Series A, 5.00%, 5/01/32	3,060	3,539,808
Orange Regional Medical Center, 5.00%, 12/01/27 (b)	900	1,037,142
	Par (000)	Value
Municipal Bonds		
New York (continued)		
State of New York Dormitory Authority, Refunding RB (continued):		
Orange Regional Medical Center, 5.00%, 12/01/28 (b)	\$ 1,800	\$ 2,049,552
		106,571,161
North Carolina 0.3%		
North Carolina Medical Care Commission, Refunding RB, WakeMed, Series A, 5.00%, 10/01/31	1,500	1,682,190
Ohio 1.2%		
State of Ohio Turnpike Commission, RB, Junior Lien, Infrastructure Projects, Series A-1, 5.25%, 2/15/31	6,000	7,076,160
Oklahoma 0.8%		
Oklahoma City Public Property Authority, Refunding RB:		
5.00%, 10/01/27	1,190	1,399,119
5.00%, 10/01/28	1,265	1,475,395
5.00%, 10/01/29	1,400	1,620,920
		4,495,434
Oregon 1.9%		
County of Klamath Oregon School District, GO:		
5.00%, 6/15/30	1,000	1,164,590
5.00%, 6/15/31	1,000	1,158,260
County of Umatilla Oregon School District No. 16R Pendleton, GO, Series A, 5.00%, 6/15/32	2,000	2,308,400
Klamath Falls Intercommunity Hospital Authority, Refunding RB, Sky Lakes Medical Center Project:		
5.00%, 9/01/30	400	467,920
5.00%, 9/01/31	300	349,203
Oregon Health & Science University, Refunding RB, Series B, 5.00%, 7/01/33	1,500	1,765,245
Oregon State Facilities Authority, Refunding RB, Reed College Project, Series A, 5.00%, 7/01/29	1,835	2,022,574

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Par (000)	Value
Municipal Bonds		
Oregon (continued)		
State of Oregon, GO, Series H, 5.00%, 5/01/36	\$ 2,000	\$ 2,280,280
		11,516,472
Pennsylvania 6.8%		
Allentown Neighborhood Improvement Zone Development Authority, RB, City Center Project, 5.00%, 5/01/22 (b)	2,000	2,162,000
City of Philadelphia Pennsylvania, ARB, Series A, AMT, 5.00%, 6/15/20	2,895	2,903,830
City of Philadelphia Pennsylvania, GO, Refunding Series A, 5.00%, 8/01/31 (d)	6,500	7,548,645
County of Allegheny Pennsylvania, GO, Refunding, Series C-68, 5.00%, 11/01/25	2,515	2,868,609
County of Allegheny Pennsylvania, GO, Series C-67: 5.00%, 11/01/25	2,700	3,085,587
5.00%, 11/01/26	2,375	2,694,247
Pennsylvania Economic Development Financing Authority, RB, PA Bridges Finco LP, AMT, 5.00%, 12/31/28	115	133,559
Pennsylvania Turnpike Commission, RB: Series B, 5.00%, 12/01/32	1,500	1,734,045
Sub-Series B, 5.25%, 12/01/31	4,000	4,428,160
Pennsylvania Turnpike Commission, Refunding RB, Sub-Series B-2, 5.00%, 6/01/31	5,000	5,781,350
South Fork Municipal Authority, Refunding RB, Conemaugh Valley Memorial Hospital, Series A (AGC), 6.00%, 7/01/20 (a)	6,225	7,100,048
		40,440,080
Puerto Rico 1.6%		
Puerto Rico Housing Finance Authority, Refunding RB, M/F Housing, Subordinate, Capital Fund Modernization, 5.13%, 12/01/27	9,000	9,421,560
Rhode Island 1.8%		
Narragansett Bay Commission, Refunding RB, Series B, 5.00%, 9/01/32	4,150	4,787,565
Providence Redevelopment Agency, Refunding RB, Series A, 5.00%, 4/01/29	1,000	1,114,470
Municipal Bonds	Par	Value
Rhode Island (continued)	(000)	
Rhode Island Health & Educational Building Corp., RB, City of Newport Issue Financing Program, Series C, 5.00%, 5/15/30	\$ 2,305	\$ 2,578,004
Rhode Island Health & Educational Building Corp., Refunding RB, 5.00%, 9/01/32	2,000	2,334,540
		10,814,579
South Carolina 2.3%		
South Carolina Jobs-Economic Development Authority, Refunding RB, The Woodlands at Furman, 4.00%, 11/15/27	1,030	1,042,978
South Carolina Public Service Authority, Refunding RB, Series A: 5.00%, 12/01/30	5,500	6,253,665
5.00%, 12/01/31	5,660	6,410,346
		13,706,989
South Dakota 0.2%		
South Dakota Health & Educational Facilities Authority, Refunding RB, Regional Health, 5.00%, 9/01/25	1,000	1,094,910
Tennessee 2.0%		
County of Memphis-Shelby Tennessee Sports Authority, Inc., Refunding RB, Memphis Arena Project: Series A, 5.00%, 11/01/23	2,695	2,912,405
Series B, 5.00%, 11/01/22	1,000	1,081,600
Knox County Health Educational & Housing Facility Board Tennessee, Refunding RB, Eastowne Village Project, 4.00%, 6/01/31 (c)	3,125	3,247,344
Metropolitan Government Nashville & Davidson County Health & Educational Facilities Board, RB, Vanderbilt University Medical Center, Series A, 5.00%, 7/01/35	4,000	4,557,920
		11,799,269
Texas 9.6%		

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City of Austin Texas Water & Wastewater System Revenue, Refunding RB, 5.00%, 11/15/30	6,000	7,243,920
City of Grapevine Texas, GO, 5.00%, 2/15/33	5,685	6,536,329

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

	Par (000)	Value
Municipal Bonds		
Texas (continued)		
City of Houston Texas, Refunding ARB, Subordinate Lien, Series A, AMT:		
5.00%, 7/01/25	\$ 1,500	\$ 1,677,705
5.00%, 7/01/32	1,010	1,101,193
Dallas-Fort Worth International Airport, ARB, Joint Improvement, Series D, AMT, 5.00%, 11/01/38	8,290	9,285,546
Dallas/Fort Worth International Airport, Refunding RB, AMT:		
Series E, 5.00%, 11/01/26	2,185	2,430,550
Series E, 5.00%, 11/01/27	4,960	5,514,082
Series F, 5.00%, 11/01/31	6,345	6,994,601
Love Field Airport Modernization Corp., RB, Southwest Airlines Co. Project, AMT, 5.00%, 11/01/28	1,000	1,107,500
New Hope Cultural Education Facilities Finance Corp., RB, Jubilee Academic Center Project, Series A (b):		
3.63%, 8/15/22	105	105,607
4.25%, 8/15/27	160	160,350
Red River Education Financing Corp., RB, 5.00%, 3/15/33	1,340	1,512,404
San Jacinto River Authority, RB, Special Project (AGM), 5.25%, 10/01/25	2,910	3,144,954
Socorro Independent School District, GO, Refunding (PSF-GTD):		
5.00%, 8/15/20 (a)	2,410	2,693,778
5.00%, 8/15/32	90	99,271
Via Metropolitan Transit Authority, Refunding RB:		
5.25%, 8/01/28	1,585	1,822,972
5.25%, 8/01/29	1,720	1,989,730
5.25%, 8/01/33	3,000	3,399,810
		56,820,302
U.S. Virgin Islands 1.0%		
Virgin Islands Public Finance Authority, Refunding RB, Series A, 5.25%, 10/01/24	5,000	5,664,750
Vermont 1.0%		
University of Vermont & State Agricultural College, Refunding RB, 4.00%, 10/01/30	5,565	5,996,677
West Virginia 1.0%		
West Virginia Hospital Finance Authority, Refunding RB, Charleston Area Medical Center, Inc., Series A, 5.13%, 9/01/23	4,000	4,257,400
	Par (000)	Value
Municipal Bonds		
West Virginia (continued)		
West Virginia University, RB, West Virginia University Project, Series B, 5.00%, 10/01/30	\$ 1,500	\$ 1,708,815
		5,966,215
Wisconsin 1.3%		
Public Finance Authority, Refunding RB, AMT:		
National Gypsum Co., 5.25%, 4/01/30	2,410	2,576,699
Wisconsin Airport Facilities, Senior Obligated Group, Series B, 5.25%, 7/01/28	4,765	5,142,960
		7,719,659
Total Municipal Bonds 140.5%		830,252,176
Municipal Bonds Transferred to Tender Option Bond Trusts (h)		
Connecticut 2.0%		
Connecticut State Health & Educational Facility Authority, Refunding RB, 5.00%, 12/01/33	10,000	11,642,689
Louisiana 2.4%		
State of Louisiana, GO, Series A, 5.00%, 8/01/24	12,000	14,007,000
Massachusetts 1.9%		
Massachusetts Development Finance Agency, Refunding RB, Partners Healthcare, Series L, 5.00%, 7/01/31	10,175	11,351,835
Minnesota 1.9%		
State of Minnesota, GO, State Various Purposes, Series A, 4.00%, 8/01/29	10,525	11,340,126
New York 11.2%		
City of New York New York, GO, Refunding, Series E, 5.00%, 8/01/27	3,507	3,783,173

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City of New York New York, GO, Series I, 5.00%, 3/01/32	7,009	8,099,055
Hudson Yards Infrastructure Corp., Refunding RB, Series A, 5.00%, 2/15/29	7,995	9,735,991
Metropolitan Transportation Authority, RB, Series B, 5.25%, 11/15/19 (a)	4,001	4,391,983
Pflugerville Independent School District, GO (PSF-GTD), 5.00%, 2/15/39	7,500	8,634,300

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2017

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

Municipal Bonds Transferred to Tender Option Bond Trusts (h)	Par (000)	Value
New York (continued)		
Port Authority of New York & New Jersey, ARB, Consolidated, 169th Series, AMT, 5.00%, 10/15/26	\$ 5,530	\$ 6,290,872
Port Authority of New York & New Jersey, RB, 178th Series, AMT, 5.00%, 12/01/32	4,009	4,514,974
Sales Tax Asset Receivable Corp., Refunding RB, Fiscal 2015, Series A, 5.00%, 10/15/31	5,010	6,006,339
State of New York Dormitory Authority, Refunding RB, Series E, 5.25%, 3/15/33	7,000	8,492,890
State of New York Urban Development Corp., RB, Personal Income Tax, Series A-1, 5.00%, 3/15/32	5,501	6,425,414
		66,374,991
Total Municipal Bonds Transferred to Tender Option Bond Trusts 19.4%		114,716,641
Total Long-Term Investments (Cost \$895,893,919) 159.9%		944,968,817
Short-Term Securities	Shares	Value
BlackRock Liquidity Funds, MuniCash, Institutional Class, 0.64% (i)(j)	3,846,940	\$3,848,479
Total Short-Term Securities (Cost \$3,847,530) 0.7%		3,848,479
Total Investments (Cost \$899,741,449*) 160.6%		948,817,296
Liabilities in Excess of Other Assets (1.2)%		(7,087,291)
Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (10.8)%		(63,782,690)
VMTP Shares at Liquidation Value (48.6)%		(287,100,000)
Net Assets Applicable to Common Shares 100.0%		\$ 590,847,315

* As of July 31, 2017, gross unrealized appreciation and depreciation based on cost for U.S. federal income tax purposes were as follows:

Tax cost	\$ 837,080,098
Gross unrealized appreciation	\$ 50,008,442
Gross unrealized depreciation	(1,938,094)
Net unrealized appreciation	\$ 48,070,348

Notes to Schedule of Investments

- (a) 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.
- (b) 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.
- (c) Variable rate security. Rate shown is the rate in effect as of period end.
- (d) When-issued security.

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(e) Non-income producing security.

(f) Issuer filed for bankruptcy and/or is in default.

(g) Security is collateralized by municipal bonds or U.S. Treasury obligations.

(h) 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.

(i) During the period ended July 31, 2017, 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, 2017	Net Activity	Shares Held at July 31, 2017	Value at July 31, 2017	Income	Net Realized Gain	Change in Unrealized Appreciation (Depreciation)
BlackRock Liquidity Funds, MuniCash, Institutional Class	4,693,275	(846,335)	3,846,940	\$ 3,848,479	\$ 15,214	\$ 870	\$ 769

(j) Current yield as of period end.

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

Derivative Financial Instruments Outstanding as of Period End

Futures Contracts

Description	Number of Contracts	Expiration Date	Notional Amount (000)	Value / Unrealized (Depreciation)
Short Contracts				
10-Year U.S. Treasury Note	(279)	September 2017	\$ 35,123	(4,907)
5-Year U.S. Treasury Note	(71)	September 2017	\$ 8,389	(756)
Long U.S. Treasury Bond	(83)	September 2017	\$ 12,696	(34,928)
Total				\$ (40,591)

Portfolio Abbreviations

AGC	Assured Guarantee Corp.
AGM	Assured Guaranty Municipal Corp.
AMT	Alternative Minimum Tax (subject to)
ARB	Airport Revenue Bonds
BARB	Building Aid Revenue Bonds
BHAC	Berkshire Hathaway Assurance Corp.
COP	Certificates of Participation
EDA	Economic Development Authority
EDC	Economic Development Corp.
GARB	General Airport Revenue Bonds
GO	General Obligation Bonds
IDA	Industrial Development Authority
LRB	Lease Revenue Bonds
M/F	Multi-Family
NPFGC	National Public Finance Guarantee Corp.
PSF-GTD	Permanent School Fund Guaranteed
Q-SBLF	Qualified School Bond Loan Fund
RB	Revenue Bonds

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2017

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Schedule of Investments (continued)

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

Fair Value Hierarchy as of Period End

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 the 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. Investments classified within Level 3 have significant unobservable inputs used by the BlackRock Global Valuation Methodologies Committee (the "Global Valuation Committee") in determining the price for Fair Valued Investments. Level 3 investments include equity or debt issued by privately held companies or funds. There may not be a secondary market, and/or there are a limited number of investors. Level 3 investments may also be adjusted to reflect illiquidity and/or non-transferability, with the amount of such discount estimated by the Global Valuation Committee in the absence of market information.

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.

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		\$ 944,968,817		\$ 944,968,817
Short-Term Securities	\$ 3,848,479			3,848,479
Total	\$ 3,848,479	\$ 944,968,817		\$ 948,817,296
Derivative Financial Instruments ²				
Liabilities:				
Interest rate contracts	\$ (40,591)			\$ (40,591)

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

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

Schedule of Investments (concluded)

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

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

	Level 1	Level 2	Level 3	Total
Liabilities:				
TOB Trust Certificates		\$ (63,666,850)		\$ (63,666,850)
VMTP Shares at Liquidation Value		(287,100,000)		(287,100,000)
Total		\$ (350,766,850)		\$ (350,766,850)

During the period ended July 31, 2017, there were no transfers between levels.

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2017

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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 Muni Intermediate Duration Fund, Inc.

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of

BlackRock Muni Intermediate Duration Fund, Inc.

Date: September 25, 2017

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 Muni Intermediate Duration Fund, Inc.

Date: September 25, 2017

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of

BlackRock Muni Intermediate Duration Fund, Inc.

Date: September 25, 2017