

BLACKROCK MUNIYIELD NEW JERSEY FUND, INC.

Form N-Q

December 20, 2016

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 811-06570

Name of Fund: BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock MuniYield

New Jersey 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: 07/31/2017

Date of reporting period: 10/31/2016

Item 1 Schedule of Investments

Schedule of Investments October 31, 2016 (Unaudited)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
New Jersey 129.9%		
Corporate 10.0%		
County of Salem New Jersey Pollution Control Financing Authority, Refunding RB, Atlantic City Electric, Series A, 4.88%, 6/01/29	\$ 4,550	\$ 4,940,071
New Jersey EDA, RB, Continental Airlines, Inc. Project, AMT: Series B, 5.63%, 11/15/30	485	555,519
Series A, 5.63%, 11/15/30	1,730	1,980,210
New Jersey EDA, Refunding RB:		
New Jersey American Water Co., Inc. Project, AMT, Series A, 5.70%, 10/01/39	7,900	8,788,513
New Jersey American Water Co., Inc. Project, AMT, Series B, 5.60%, 11/01/34	2,430	2,705,951
United Water of New Jersey, Inc., Series B (AMBAC), 4.50%, 11/01/25	4,500	4,703,625
		23,673,889
County/City/Special District/School District 20.5%		
Casino Reinvestment Development Authority, Refunding RB:		
5.25%, 11/01/39	2,280	2,349,016
5.25%, 11/01/44	6,500	6,670,690
City of Bayonne New Jersey, GO, Refunding, Qualified General Improvement (BAM):		
5.00%, 7/01/33	925	1,079,207
5.00%, 7/01/35	1,435	1,662,476
City of Margate New Jersey, GO, Refunding, Improvement:		
5.00%, 1/15/26	1,200	1,372,944
5.00%, 1/15/27	845	965,294
City of Perth Amboy New Jersey, GO, CAB, Refunding (AGM), 5.00%, 7/01/33	755	768,484
County of Essex New Jersey Improvement Authority, RB, AMT, 5.25%, 7/01/45 (a)	3,765	3,889,433
County of Essex New Jersey Improvement Authority, Refunding RB, Project Consolidation (NPFGC):		
5.50%, 10/01/28	2,700	3,571,155
5.50%, 10/01/29	5,085	6,781,560
County of Hudson New Jersey, COP, Refunding (NPFGC), 6.25%, 12/01/16	900	903,951
	Par	
Municipal Bonds	(000)	Value
New Jersey (continued)		
County/City/Special District/School District (continued)		
County of Hudson New Jersey Improvement Authority, RB, Harrison Parking Facility Project, Series C (AGC), 5.38%, 1/01/44	\$ 4,800	\$ 5,170,368
County of Mercer New Jersey Improvement Authority, RB, Courthouse Annex Project, 5.00%, 9/01/40	1,470	1,711,477
County of Middlesex New Jersey, COP, Refunding, Civic Square IV Redevelopment, 5.00%, 10/15/31	1,400	1,745,478
County of Monmouth New Jersey Improvement Authority, Refunding RB, Government Loan (AMBAC), 5.00%, 12/01/16	5	5,016
County of Union New Jersey Improvement Authority, LRB, Guaranteed Lease, Family Court Building Project, 5.00%, 5/01/42	1,400	1,632,288
County of Union New Jersey Utilities Authority, Refunding RB, Series A:		
Resources Recovery Facility, Covanta Union, Inc., AMT, 5.25%, 12/01/31	670	738,903
Solid Waste System, County Deficiency Agreement, 5.00%, 6/15/41	4,115	4,576,538
Monroe Township Board of Education Middlesex County, GO, Refunding, 5.00%, 3/01/38	1,625	1,892,946
New Brunswick New Jersey Parking Authority, Refunding RB, City Guaranteed, Series A (BAM), 5.00%, 9/01/39	735	864,140
		48,351,364
Education 28.1%		
Atlantic County Improvement Authority, RB, Stockton University Atlantic City, Series A (AGM), 4.00%, 7/01/46	1,000	1,037,340
New Jersey EDA, RB:		
Leap Academy Charter School, Series A, 6.20%, 10/01/44	235	241,336
Leap Academy Charter School, Series A, 6.30%, 10/01/49	375	386,160
MSU Student Housing Project Provide, 5.75%, 6/01/31	1,000	1,110,350

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Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

	Par	
	(000)	Value
Municipal Bonds		
New Jersey (continued)		
Education (continued)		
New Jersey EDA, RB (continued):		
MSU Student Housing Project Provide, 5.88%, 6/01/42	\$ 1,500	\$ 1,659,690
Team Academy Charter School Project, 6.00%, 10/01/33	2,835	3,257,585
New Jersey EDA, Refunding RB, Greater Brunswick Charter School, Inc. Project, Series A (a):		
5.88%, 8/01/44	780	821,036
6.00%, 8/01/49	555	583,183
New Jersey Educational Facilities Authority, RB:		
Higher Educational Capital Improvement Fund, Series A, 5.00%, 9/01/32	3,925	4,316,676
Montclair State University, Series J, 5.25%, 7/01/18 (b)	640	686,720
New Jersey Educational Facilities Authority, Refunding RB:		
City of New Jersey University Issue, Series D, 4.00%, 7/01/34	535	568,266
College of New Jersey, Series D (AGM), 5.00%, 7/01/18 (b)	1,485	1,586,752
College of New Jersey, Series D (AGM), 5.00%, 7/01/18 (b)	4,600	4,914,410
College of New Jersey, Series F 4.00%, 7/01/33	570	615,515
Georgian Court University, Series D, 5.25%, 7/01/37	1,000	1,021,960
Kean University, Series A, 5.50%, 9/01/36	4,500	4,977,090
Montclair State University, Series A, 5.00%, 7/01/44	6,790	7,753,569
Montclair State University, Series B, 5.00%, 7/01/33	1,000	1,194,500
New Jersey Institute of Technology, Series H, 5.00%, 7/01/31	1,250	1,388,237
Ramapo College, Series B, 5.00%, 7/01/42	340	379,025
Rider University, Series A, 5.00%, 7/01/32	1,000	1,091,460
Rowan University, Series B (AGC), 5.00%, 7/01/18 (b)	1,800	1,923,030
Seton Hall University, Series D, 5.00%, 7/01/38	395	448,270
	Par	
	(000)	Value
Municipal Bonds		
New Jersey (continued)		
Education (continued)		
New Jersey Educational Facilities Authority, Refunding RB (continued):		
University of Medicine & Dentistry, Series B, 7.13%, 6/01/19 (b)	\$ 1,300	\$ 1,499,472
University of Medicine & Dentistry, Series B, 7.50%, 6/01/19 (b)	1,625	1,889,826
New Jersey Higher Education Student Assistance Authority, Refunding RB:		
Series 1, AMT, 5.75%, 12/01/29	3,255	3,624,345
Series 1A, 5.00%, 12/01/25	675	708,824
Series 1A, 5.00%, 12/01/26	425	445,387
Series 1A, 5.25%, 12/01/32	900	966,060
New Jersey Institute of Technology, RB, Series A:		
5.00%, 7/01/40	1,500	1,721,235
5.00%, 7/01/42	3,040	3,489,342
5.00%, 7/01/45	2,935	3,324,856
Rutgers The State University of New Jersey, Refunding RB, Series L, 5.00%, 5/01/43	5,870	6,802,626
		66,434,133
Health 12.8%		
County of Camden New Jersey Improvement Authority, Refunding RB, 5.00%, 2/15/34	590	660,157
New Jersey EDA, Refunding RB, Lions Gate Project:		
5.00%, 1/01/34	500	532,465
5.25%, 1/01/44	315	337,280
New Jersey Health Care Facilities Financing Authority, RB:		
Hospital Asset Transformation Program, Series A, 5.25%, 10/01/18 (b)	515	557,781
Hospital Asset Transformation Program, Series A, 5.25%, 10/01/38	1,785	1,887,977
Meridian Health System Obligated Group, Series I (AGC), 5.00%, 7/01/38	925	973,831
Robert Wood Johnson University Hospital, Series A, 5.50%, 7/01/43	1,420	1,658,205
Virtua Health, Series A (AGC), 5.50%, 7/01/38	2,500	2,758,325

Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

	Par	
	(000)	Value
Municipal Bonds		
New Jersey (continued)		
Health (continued)		
New Jersey Health Care Facilities Financing Authority, Refunding RB:		
AHS Hospital Corp., 6.00%, 7/01/21 (b)	\$ 2,435	\$ 2,963,858
Princeton Healthcare System, 5.00%, 7/01/34	860	1,011,265
Princeton Healthcare System, 5.00%, 7/01/39	1,445	1,674,062
Robert Wood Johnson University Hospital, 5.00%, 1/01/20 (b)	1,000	1,122,360
RWJ Barnabas Health Obligated Group, Series A, 4.00%, 7/01/43 (c)	935	962,947
RWJ Barnabas Health Obligated Group, Series A, 5.00%, 7/01/43 (c)	2,160	2,478,967
St. Barnabas Health Care System, Series A, 5.63%, 7/01/21 (b)	1,090	1,309,886
St. Barnabas Health Care System, Series A, 5.63%, 7/01/21 (b)	3,030	3,641,242
St. Barnabas Health Care System, Series A, 5.00%, 7/01/29	3,575	3,628,875
St. Joseph's Healthcare System Obligated Group, 4.00%, 7/01/34	265	274,455
St. Joseph's Healthcare System Obligated Group, 5.00%, 7/01/41	705	787,386
St. Joseph's Healthcare System Obligated Group, 4.00%, 7/01/48	930	935,152
		30,156,476
Housing 2.8%		
New Jersey Housing & Mortgage Finance Agency, RB:		
M/F Housing, Series A, 4.75%, 11/01/29	2,305	2,428,594
S/F Housing, Series AA, 6.50%, 10/01/38	80	82,496
S/F Housing, Series CC, 5.00%, 10/01/34	1,460	1,519,232
S/F Housing, Series U, AMT, 4.95%, 10/01/32	250	251,670
S/F Housing, Series U, AMT, 5.00%, 10/01/37	260	262,447
	Par	
Municipal Bonds		
New Jersey (continued)		
Housing (continued)		
Newark Housing Authority, RB, South Ward Police Facility (AGC), 6.75%, 12/01/19 (b)	\$ 1,750	\$ 2,052,610
		6,597,049
State 13.1%		
Garden State Preservation Trust, RB, CAB, Series B (AGM) (d):		
0.00%, 11/01/23	1,460	1,246,606
0.00%, 11/01/28	4,540	3,239,063
New Jersey EDA, RB:		
Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/25	2,000	2,401,120
Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/33	9,090	9,339,884
School Facilities Construction (AGC), 5.50%, 12/15/34	1,320	1,421,917
School Facilities Construction, Series CC-2, 5.00%, 12/15/31	1,125	1,201,646
New Jersey EDA, Refunding RB:		
5.25%, 6/15/19 (b)	265	293,729
5.25%, 12/15/33	735	788,104
Cigarette Tax, 5.00%, 6/15/26	440	484,638
Cigarette Tax, 5.00%, 6/15/28	720	782,136
Cigarette Tax, 5.00%, 6/15/29	1,760	1,902,683
School Facilities Construction, Series AA, 5.50%, 12/15/29	3,000	3,257,220
School Facilities Construction, Series GG, 5.25%, 9/01/27	3,000	3,309,450
State of New Jersey, COP, Equipment Lease Purchase, Series A, 5.25%, 6/15/28	1,100	1,186,757
		30,854,953
Transportation 41.0%		
Delaware River Port Authority of Pennsylvania & New Jersey, RB:		
5.00%, 1/01/40	2,620	3,012,004
Series D, 5.00%, 1/01/40	1,535	1,699,506
New Jersey EDA, RB, Private Activity Bond, Goethals Bridge Replacement Project, AMT:		
5.38%, 1/01/43	9,420	10,703,098
(AGM), 5.00%, 1/01/31	1,000	1,138,440

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Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

	Par	
	(000)	Value
Municipal Bonds		
New Jersey (continued)		
Transportation (continued)		
New Jersey State Turnpike Authority, RB:		
Growth & Income Securities, Series B (AMBAC), 5.15%, 1/01/17 (b)	\$ 1,000	\$ 1,007,440
Series A, 5.00%, 1/01/38	10,750	12,289,615
Series A, 5.00%, 1/01/43	610	694,930
Series E, 5.25%, 1/01/40	2,525	2,718,743
New Jersey State Turnpike Authority, Refunding RB, Series A, 5.00%, 1/01/35	1,000	1,134,970
New Jersey Transportation Trust Fund Authority, RB:		
CAB, Transportation System, Series C (AMBAC), 0.00%, 12/15/35 (d)	4,140	1,845,529
Federal Highway Reimbursement Revenue Notes, Series A, 5.00%, 6/15/30 (c)	1,250	1,386,875
Federal Highway Reimbursement Revenue Notes, Series A, 5.00%, 6/15/30 (c)	3,070	3,194,458
Transportation Program, Series AA, 5.00%, 6/15/38	5,935	6,414,489
Transportation Program, Series AA, 5.25%, 6/15/41	2,960	3,298,239
Transportation System, 6.00%, 12/15/38	1,950	2,119,319
Transportation System, Series A, 6.00%, 6/15/35	6,030	6,894,702
Transportation System, Series A, 5.88%, 12/15/38	3,650	3,957,440
Transportation System, Series A, 5.50%, 6/15/41	5,500	6,061,660
Transportation System, Series A (AGC), 5.63%, 12/15/28	1,250	1,369,475
Transportation System, Series A (AGC), 5.50%, 12/15/38	1,000	1,070,710
Transportation System, Series AA, 5.50%, 6/15/39	5,520	6,195,041
Port Authority of New York & New Jersey, ARB:		
Consolidated, 93rd Series, 6.13%, 6/01/94	5,000	6,359,750
JFK International Air Terminal, Series 8, 6.00%, 12/01/42	2,700	3,127,734
	Par	
	(000)	Value
Municipal Bonds		
New Jersey (continued)		
Transportation (continued)		
Port Authority of New York & New Jersey, Refunding ARB, Consolidated:		
152nd Series, AMT, 5.75%, 11/01/30	\$ 2,300	\$ 2,457,481
152nd Series, AMT, 5.25%, 11/01/35	240	253,399
166th Series, 5.25%, 7/15/36	4,000	4,619,400
172nd Series, AMT, 5.00%, 10/01/34	1,500	1,681,575
		96,706,022
Utilities 1.6%		
Rahway Valley Sewerage Authority, RB, CAB, Series A (NPFGC), 0.00%, 9/01/31 (d)	6,000	3,823,980
Total Municipal Bonds in New Jersey		306,597,866
New York 0.1%		
Transportation 0.1%		
Port Authority of New York & New Jersey, ARB, Consolidated, 169th Series, 5.00%, 10/15/41	250	274,795
Total Municipal Bonds - 130.0%		306,872,661
Municipal Bonds Transferred to		
Tender Option Bond Trusts (e)		
New Jersey 30.0%		
County/City/Special District/School District 6.7%		
County of Hudson New Jersey Improvement Authority, RB, Hudson County Vocational-Technical Schools Project, 5.25%, 5/01/51	1,440	1,716,595

Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

Municipal Bonds Transferred to	Par	
Tender Option Bond Trusts (e)	(000)	Value
New Jersey (continued)		
County/City/Special District/School District (continued)		
County of Union New Jersey Utilities Authority, Refunding LRB, Resource Recovery Facility, Covanta Union, Inc., Series A, AMT, 5.25%, 12/01/31	\$ 12,820	\$ 14,138,409
		15,855,004
Education 0.9%		
Rutgers The State University of New Jersey, RB, Series F, 5.00%, 5/01/19 (b)	2,011	2,210,229
State 7.1%		
Garden State Preservation Trust, RB, Election of 2005, Series A (AGM), 5.75%, 11/01/28	5,460	6,960,790
New Jersey EDA, RB, School Facilities Construction (AGC):		
6.00%, 12/15/18 (b)	3,550	3,927,640
6.00%, 12/15/34	50	55,580
New Jersey EDA, Refunding RB, Series NN, School Facilities Construction, 5.00%, 3/01/29 (f)	5,230	5,750,063
		16,694,073
Transportation 15.3%		
New Jersey State Turnpike Authority, RB, Series A, 5.00%, 1/01/38 (f)	8,820	10,083,200
New Jersey Transportation Trust Fund Authority, RB, Transportation System:		
Series A (AMBAC), 5.00%, 12/15/32	4,100	4,248,912
Series B, 5.25%, 6/15/36 (f)	5,001	5,481,004
Municipal Bonds Transferred to		
	Par	
Tender Option Bond Trusts (e)		
	(000)	Value
New Jersey (continued)		
Transportation (continued)		
Port Authority of New York & New Jersey, RB, Consolidated, 169th Series, AMT, 5.00%, 10/15/41	\$ 11,257	\$ 12,373,132
Port Authority of New York & New Jersey, Refunding RB, Consolidated, 152nd Series, AMT, 5.25%, 11/01/35	3,764	3,973,826
		36,160,074
Total Municipal Bonds Transferred to		
		70,919,380
Tender Option Bond Trusts 30.0%		
Total Long-Term Investments		
(Cost \$347,452,637) 160.0%		377,792,041
Short-Term Securities		
	Shares	
BlackRock Liquidity Funds, MuniCash, Institutional Class, 0.44% (g)(h)	1,989,630	1,989,829
Total Short-Term Securities		
(Cost \$1,989,630) 0.8%		1,989,829
Total Investments (Cost \$349,442,267*) 160.9%		
		379,781,870
Liabilities in Excess of Other Assets (0.4)%		
		(972,803)
Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (17.3)%		
		(40,727,000)
VRDP Shares at Liquidation Value, Net of Deferred Offering		
Costs (43.2)%		(101,977,667)
Net Assets Applicable to Common Shares 100.0%		
		\$ 236,104,400

* As of October 31, 2016, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

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Tax cost	\$ 309,341,909
Gross unrealized appreciation	\$ 30,819,271
Gross unrealized depreciation	(1,021,612)
Net unrealized appreciation	\$ 29,797,659

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) 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.

- (c) When-issued security.

- (d) Zero-coupon bond.

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Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

- (e) 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.
- (f) All or a portion of security is subject to a recourse agreement. The aggregate maximum potential amount the Fund could ultimately be required to pay under the agreements, which expire between June 15, 2019 to September 1, 2020, is \$14,350,925.
- (g) During the period ended October 31, 2016, investments in issuers considered to be affiliates 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 July 31, 2016	Net Activity	Shares Held at October 31, 2016	Value at October 31, 2016	Income	Realized Gain
BlackRock Liquidity Funds, MuniCash, Institutional Class	4,170,614	(2,180,984)	1,989,630	\$ 1,989,829	\$ 1,373	\$ 19

- (h) Current yield as of period end.

For Fund compliance purposes, the Fund's sector classifications refer to any one or more of the sector sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by the investment advisor. These definitions may not apply for purposes of this report, which may combine such sector sub-classifications for reporting ease.

Derivative Financial Instruments Outstanding as of Period End

Futures Contracts

Contracts Short	Issue	Expiration	Notional Value	Unrealized Appreciation
(1)	5-Year U.S. Treasury Note	December 2016	\$ 120,797	\$ 905
(45)	10-Year U.S. Treasury Note	December 2016	\$ 5,833,125	81,287
(30)	Long U.S. Treasury Bond	December 2016	\$ 4,881,563	190,443
(3)	Ultra U.S. Treasury Bond	December 2016	\$ 527,812	31,027
Total				\$ 303,662

Portfolio Abbreviations

AGC	Assured Guarantee Corp.
AGM	Assured Guaranty Municipal Corp.
AMBAC	American Municipal Bond Assurance Corp.
AMT	Alternative Minimum Tax (subject to)
ARB	Airport Revenue Bonds
BAM	Build America Mutual Assurance Co.
CAB	Capital Appreciation Bonds
COP	Certificates of Participation
EDA	Economic Development Authority
GO	General Obligation Bonds

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LRB	Lease Revenue Bonds
M/F	Multi-Family
NPFGC	National Public Finance Guarantee Corp.
RB	Revenue Bonds
S/F	Single-Family

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BLACKROCK MUNIYIELD NEW JERSEY FUND, INC.

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Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

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 methodologies 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 Global Valuation Committee in determining the price for Fair Valued Investments. Level 3 Investments include equity or debt issued by privately-held companies. 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 methodologies 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 is based on the pricing transparency of the investments 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 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		\$ 377,792,041		\$ 377,792,041
Short-Term Securities	\$ 1,989,829			1,989,829
Total	\$ 1,989,829	\$ 377,792,041		\$ 379,781,870
Derivative Financial Instruments²				
Assets:				
Interest rate contracts	\$ 303,662			\$ 303,662

¹ See above Schedule of Investments for values in each sector.

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

Schedule of Investments (concluded)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

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
Assets:				
Cash pledged for futures contracts	\$ 188,150			\$ 188,150
Liabilities:				
TOB Trust Certificates		\$ (40,642,302)		(40,642,302)
VRDP Shares at Liquidation Value		(102,200,000)		(102,200,000)
Total	\$ 188,150	\$ (142,842,302)		\$ (142,654,152)

During the period ended October 31, 2016, 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 MuniYield New Jersey Fund, Inc.

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

Date: December 20, 2016

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 MuniYield New Jersey Fund, Inc.

Date: December 20, 2016

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

Date: December 20, 2016