

BLACKROCK MUNIYIELD NEW JERSEY FUND, INC.  
Form N-Q  
June 22, 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 52<sup>nd</sup> Street, New York, NY 10055

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

Date of fiscal year end: 07/31/2016

Date of reporting period: 04/30/2016

Item 1 Schedule of Investments

## Schedule of Investments April 30, 2016 (Unaudited)

## BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

(Percentages shown are based on Net Assets)

|  | Par        |              |
|--|------------|--------------|
|  | (000)      | Value        |
| <b>Municipal Bonds</b>   |            |              |
| <b>New Jersey 129.6%</b>   |            |              |
| <b>Corporate 10.3%</b>   |            |              |
| County of Middlesex New Jersey Improvement Authority, RB, Senior Heldrich Center Hotel, Series A, 5.00%, 1/01/20                 | \$ 535     | \$ 499,610   |
| County of Salem New Jersey Pollution Control Financing Authority, Refunding RB, Atlantic City Electric, Series A, 4.88%, 6/01/29 | 4,550      | 5,012,052    |
| New Jersey EDA, RB, Continental Airlines, Inc. Project, AMT:   |            |              |
| Series B, 5.63%, 11/15/30  | 485        | 555,640      |
| Series A, 5.63%, 11/15/30  | 1,730      | 1,981,975    |
| New Jersey EDA, Refunding RB:  |            |              |
| New Jersey American Water Co., Inc. Project, AMT, Series A, 5.70%, 10/01/39  | 7,900      | 8,955,440    |
| New Jersey American Water Co., Inc. Project, AMT, Series B, 5.60%, 11/01/34  | 2,430      | 2,749,715    |
| United Water of New Jersey, Inc., Series B (AMBAC), 4.50%, 11/01/25  | 4,500      | 4,780,980    |
|  |            | 24,535,412   |
| <b>County/City/Special District/School District 22.0%</b>  |            |              |
| Casino Reinvestment Development Authority, Refunding RB:   |            |              |
| 5.25%, 11/01/39  | 2,280      | 2,362,240    |
| 5.25%, 11/01/44  | 6,500      | 6,697,730    |
| City of Bayonne New Jersey, GO, Refunding Qualified General Improvement:   |            |              |
| 5.00%, 7/01/33   | 925        | 1,089,669    |
| 5.00%, 7/01/35   | 1,435      | 1,682,193    |
| City of Margate New Jersey, GO, Refunding, Improvement:  |            |              |
| 5.00%, 1/15/26   | 1,200      | 1,395,096    |
| 5.00%, 1/15/27   | 845        | 980,318      |
| City of Perth Amboy New Jersey, GO, CAB, Refunding (AGM), 5.00%, 7/01/33   | 755        | 779,575      |
| County of Essex New Jersey Improvement Authority, RB, AMT, 5.25%, 7/01/45 (a)  | 3,765      | 3,841,091    |
|  | <b>Par</b> |              |
|  | (000)      | Value        |
| <b>Municipal Bonds</b>   |            |              |
| <b>New Jersey (continued)</b>  |            |              |
| <b>County/City/Special District/School District (continued)</b>  |            |              |
| County of Essex New Jersey Improvement Authority, Refunding RB, Project Consolidation (NPFGC):                                   |            |              |
| 5.50%, 10/01/28  | \$ 2,700   | \$ 3,627,153 |
| 5.50%, 10/01/29  | 5,085      | 6,895,107    |
| County of Gloucester New Jersey Improvement Authority, RB, County Guaranteed Loan County Capital Program, 5.00%, 4/01/38         | 1,000      | 1,070,310    |
| County of Hudson New Jersey, COP, Refunding (NPFGC), 6.25%, 12/01/16   | 1,500      | 1,543,425    |
| County of Hudson New Jersey Improvement Authority, RB:   |            |              |
| 5.25%, 5/01/51 (b)   | 1,440      | 1,715,674    |
| Harrison Parking Facility Project, Series C (AGC), 5.38%, 1/01/44  | 4,800      | 5,266,752    |
| County of Mercer Improvement Authority, RB, Courthouse Annex Project, 5.00%, 9/01/40   | 1,470      | 1,724,854    |
| County of Middlesex New Jersey, COP, Refunding, Civic Square IV Redevelopment, 5.00%, 10/15/31                                   | 1,400      | 1,769,586    |
| 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      | 1,642,662    |
| County of Union New Jersey Utilities Authority, Refunding RB, Series A:  |            |              |
| Resources Recovery Facility, Covanta Union, Inc., AMT, 5.25%, 12/01/31   | 670        | 747,385      |
| Solid Waste System, County Deficiency Agreement, 5.00%, 6/15/41  | 4,115      | 4,623,984    |
| Monroe Township Board of Education Middlesex County, GO, Refunding, 5.00%, 3/01/38   | 1,625      | 1,903,151    |



## Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

|   | Par          |              |
|---|--------------|--------------|
|   | (000)        | Value        |
| <b>Municipal Bonds</b>  |              |              |
| <b>New Jersey (continued)</b>   |              |              |
| <b>County/City/Special District/School District (continued)</b>   |              |              |
| New Brunswick Parking Authority, Refunding RB, Series A, 5.00%, 9/01/39 (b)                                   | \$ 735       | \$ 872,085   |
|   |              | 52,235,056   |
| <b>Education 27.8%</b>  |              |              |
| New Jersey EDA, RB:   |              |              |
| Leap Academy Charter School, Series A, 6.20%, 10/01/44  | 235          | 242,760      |
| Leap Academy Charter School, Series A, 6.30%, 10/01/49  | 375          | 387,311      |
| MSU Student Housing Project Provide,<br>5.75%, 6/01/31  | 1,000        | 1,128,460    |
| MSU Student Housing Project Provide,<br>5.88%, 6/01/42  | 1,500        | 1,678,530    |
| Team Academy Charter School Project, 6.00%, 10/01/33  | 2,835        | 3,300,705    |
| New Jersey EDA, Refunding RB, Greater Brunswick Charter School, Inc. Project, Series A (a):<br>5.88%, 8/01/44 | 780          | 817,300      |
| 6.00%, 8/01/49  | 555          | 580,475      |
| New Jersey Educational Facilities Authority, RB:  |              |              |
| Higher Educational Capital Improvement Fund, Series A, 5.00%, 9/01/32   | 3,925        | 4,241,237    |
| Montclair State University, Series J,<br>5.25%, 7/01/18 (c)   | 1,140        | 1,249,280    |
| New Jersey Educational Facilities Authority, Refunding RB:  |              |              |
| College of New Jersey, Series D (AGM), 5.00%, 7/01/18 (c)   | 1,485        | 1,619,363    |
| College of New Jersey, Series D (AGM), 5.00%, 7/01/35   | 4,630        | 5,006,049    |
| Georgian Court University, Series D,<br>5.25%, 7/01/37  | 1,000        | 1,039,040    |
| Kean University, Series A, 5.50%, 9/01/36   | 4,500        | 5,068,260    |
| Montclair State University, Series A, 5.00%, 7/01/44  | 6,790        | 7,793,969    |
| Montclair State University, Series B,<br>5.00%, 7/01/33 (b)   | 1,000        | 1,210,040    |
| New Jersey Institute of Technology, Series H, 5.00%, 7/01/31  | 1,250        | 1,410,325    |
|   | <b>Par</b>   |              |
|   | <b>(000)</b> | <b>Value</b> |
| <b>Municipal Bonds</b>  |              |              |
| <b>New Jersey (continued)</b>   |              |              |
| <b>Education (continued)</b>  |              |              |
| New Jersey Educational Facilities Authority, Refunding RB (continued):  |              |              |
| Ramapo College, Series B, 5.00%, 7/01/42  | \$ 340       | \$ 381,606   |
| Rider University, Series A, 5.00%, 7/01/32  | 1,000        | 1,103,690    |
| Rowan University, Series B (AGC), 5.00%, 7/01/24  | 1,800        | 1,952,280    |
| Seton Hall University, Series D, 5.00%, 7/01/38   | 395          | 452,480      |
| University of Medicine & Dentistry, Series B, 7.13%, 6/01/19 (c)  | 1,300        | 1,543,035    |
| University of Medicine & Dentistry, Series B, 7.50%, 6/01/19 (c)  | 1,625        | 1,947,303    |
| New Jersey Higher Education Student Assistance Authority, Refunding RB:                                       |              |              |
| Series 1, AMT, 5.75%, 12/01/29  | 3,675        | 4,135,624    |
| Series 1A, 5.00%, 12/01/25  | 740          | 778,043      |
| Series 1A, 5.00%, 12/01/26  | 465          | 487,897      |
| Series 1A, 5.25%, 12/01/32  | 900          | 978,624      |
| New Jersey Institute of Technology, RB, Series A:   |              |              |
| 5.00%, 7/01/40  | 1,500        | 1,736,325    |
| 5.00%, 7/01/42  | 3,040        | 3,505,910    |
| 5.00%, 7/01/45  | 2,935        | 3,339,443    |
| Rutgers - The State University of New Jersey, Refunding RB, Series L, 5.00%, 5/01/43                          | 5,870        | 6,779,146    |
|   |              | 65,894,510   |
| <b>Health 9.8%</b>  |              |              |
| County of Camden New Jersey Improvement Authority, Refunding RB, 5.00%, 2/15/34                               | 590          | 670,564      |
| New Jersey EDA, Refunding RB, Lions Gate Project:<br>5.00%, 1/01/34   | 500          | 520,315      |

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|  |     |         |
|--|-----|---------|
| 5.25%, 1/01/44   | 315 | 329,852 |
| New Jersey Health Care Facilities Financing Authority, RB:             |     |         |
| Meridian Health System Obligated Group, Series I (AGC), 5.00%, 7/01/38 | 935 | 999,468 |

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BLACKROCK MUNIYIELD NEW JERSEY FUND, INC.

APRIL 30, 2016

## Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

|  | Par        |              |
|--|------------|--------------|
|  | (000)      | Value        |
| <b>Municipal Bonds</b>   |            |              |
| <b>New Jersey (continued)</b>  |            |              |
| <b>Health (continued)</b>  |            |              |
| New Jersey Health Care Facilities Financing Authority, RB (continued):   |            |              |
| Robert Wood Johnson University Hospital, Series A, 5.50%, 7/01/43  | \$ 1,420   | \$ 1,675,600 |
| Virtua Health, Series A (AGC), 5.50%, 7/01/38  | 2,500      | 2,807,775    |
| New Jersey Health Care Facilities Financing Authority, Refunding RB:   |            |              |
| AHS Hospital Corp., 6.00%, 7/01/41   | 2,435      | 2,927,187    |
| Princeton Healthcare System, 5.00%, 7/01/34  | 860        | 1,020,579    |
| Princeton Healthcare System, 5.00%, 7/01/39  | 1,445      | 1,692,543    |
| Robert Wood Johnson University Hospital, 5.00%, 7/01/31  | 1,000      | 1,112,250    |
| South Jersey Hospital, 5.00%, 7/01/36  | 385        | 387,075      |
| St. Barnabas Health Care System, Series A, 5.00%, 7/01/29  | 4,140      | 4,256,293    |
| St. Barnabas Health Care System, Series A, 5.63%, 7/01/32  | 1,090      | 1,283,791    |
| St. Barnabas Health Care System, Series A, 5.63%, 7/01/37  | 3,030      | 3,521,739    |
|  |            | 23,205,031   |
| <b>Housing 2.9%</b>  |            |              |
| New Jersey Housing & Mortgage Finance Agency, RB:  |            |              |
| M/F Housing, Series A, 4.75%, 11/01/29   | 2,305      | 2,452,221    |
| S/F Housing, Series AA, 6.50%, 10/01/38  | 130        | 134,438      |
| S/F Housing, Series CC, 5.00%, 10/01/34  | 1,575      | 1,654,805    |
| S/F Housing, Series U, AMT, 4.95%, 10/01/32  | 260        | 264,238      |
| S/F Housing, Series U, AMT, 5.00%, 10/01/37  | 265        | 267,907      |
|  | <b>Par</b> |              |
| <b>Municipal Bonds</b>   |            |              |
| <b>New Jersey (continued)</b>  |            |              |
| <b>Housing (continued)</b>   |            |              |
| Newark Housing Authority, RB, South Ward Police Facility (AGC), 6.75%, 12/01/38  | \$ 1,750   | \$ 2,053,205 |
|  |            | 6,826,814    |
| <b>State 15.1%</b>   |            |              |
| Garden State Preservation Trust, RB, CAB, Series B (AGM) (d):  |            |              |
| 0.00%, 11/01/23  | 1,460      | 1,240,868    |
| 0.00%, 11/01/28  | 4,540      | 3,230,346    |
| New Jersey EDA, RB:  |            |              |
| Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/25  | 2,000      | 2,358,460    |
| Motor Vehicle Surcharge, Series A (NPFGC), 5.25%, 7/01/33  | 9,090      | 9,183,809    |
| School Facilities Construction (AGC),<br>5.50%, 12/15/18 (c)   | 2,345      | 2,631,231    |
| School Facilities Construction (AGC),<br>5.50%, 12/15/34   | 1,320      | 1,448,436    |
| School Facilities Construction, Series CC-2, 5.00%, 12/15/31   | 1,125      | 1,186,189    |
| New Jersey EDA, Refunding RB:  |            |              |
| 5.25%, 6/15/19 (c)   | 265        | 300,311      |
| 5.25%, 12/15/33  | 735        | 787,178      |
| Cigarette Tax, 5.00%, 6/15/26  | 440        | 477,594      |
| Cigarette Tax, 5.00%, 6/15/28  | 720        | 775,930      |
| Cigarette Tax, 5.00%, 6/15/29  | 1,760      | 1,889,518    |
| School Facilities Construction, Series AA, 5.50%, 12/15/29   | 3,000      | 3,301,410    |
| School Facilities Construction, Series GG, 5.25%, 9/01/27  | 3,000      | 3,244,170    |
| New Jersey Health Care Facilities Financing Authority, RB, Hospital Asset Transformation Program, Series<br>A, 5.25%, 10/01/38 | 2,300      | 2,461,736    |

## Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

|   | Par      |                    |
|---|----------|--------------------|
|   | (000)    | Value              |
| <b>Municipal Bonds</b>  |          |                    |
| <b>New Jersey (continued)</b>   |          |                    |
| <b>State (continued)</b>  |          |                    |
| State of New Jersey, COP, Equipment Lease Purchase, Series A, 5.25%, 6/15/28              | \$ 1,100 | \$ 1,200,144       |
|   |          | 35,717,330         |
| <b>Transportation 40.1%</b>   |          |                    |
| Delaware River Port Authority of Pennsylvania & New Jersey, RB:                           |          |                    |
| 5.00%, 1/01/40  | 2,620    | 3,050,754          |
| Series D, 5.00%, 1/01/40  | 1,535    | 1,726,230          |
| New Jersey EDA, RB, Private Activity Bond, The Goethals Bridge Replacement Project, AMT:  |          |                    |
| 5.38%, 1/01/43  | 9,420    | 10,605,695         |
| (AGM), 5.00%, 1/01/31   | 1,000    | 1,126,920          |
| New Jersey State Turnpike Authority, RB:  |          |                    |
| Growth & Income Securities, Series B (AMBAC), 5.15%, 1/01/17 (c)                          | 2,500    | 2,576,700          |
| Series A, 5.00%, 1/01/38  | 10,750   | 12,444,415         |
| Series A, 5.00%, 1/01/43  | 610      | 702,732            |
| Series E, 5.25%, 1/01/40  | 2,525    | 2,769,976          |
| New Jersey State Turnpike Authority, Refunding RB, Series A, 5.00%, 1/01/35               | 1,000    | 1,151,400          |
| New Jersey Transportation Trust Fund Authority, RB:                                       |          |                    |
| CAB, Transportation System, Series C (AMBAC), 0.00%, 12/15/35 (d)                         | 4,140    | 1,792,703          |
| Transportation Program, Series AA, 5.00%, 6/15/38   | 5,935    | 6,313,416          |
| Transportation Program, Series AA, 5.25%, 6/15/41   | 2,960    | 3,226,282          |
| Transportation System, 6.00%, 12/15/38  | 1,950    | 2,153,931          |
| Transportation System, Series A, 6.00%, 6/15/35   | 6,030    | 6,905,194          |
| Transportation System, Series A, 5.88%, 12/15/38  | 3,650    | 4,020,073          |
| Transportation System, Series A, 5.50%, 6/15/41   | 5,500    | 6,006,605          |
| Transportation System, Series A (AGC), 5.63%, 12/15/28                                    | 1,250    | 1,403,438          |
| Transportation System, Series A (AGC), 5.50%, 12/15/38                                    | 1,000    | 1,089,750          |
|   | Par      |                    |
|   | (000)    | Value              |
| <b>Municipal Bonds</b>  |          |                    |
| <b>New Jersey (continued)</b>   |          |                    |
| <b>Transportation (continued)</b>   |          |                    |
| New Jersey Transportation Trust Fund Authority, RB (continued):                           |          |                    |
| Transportation System, Series AA, 5.50%, 6/15/39  | \$ 5,520 | \$ 6,108,156       |
| Port Authority of New York & New Jersey, ARB:   |          |                    |
| Consolidated, 93rd Series, 6.13%, 6/01/94   | 5,000    | 6,361,850          |
| JFK International Air Terminal, Series 8, 6.00%, 12/01/42                                 | 2,700    | 3,168,909          |
| Port Authority of New York & New Jersey, Refunding ARB, Consolidated:                     |          |                    |
| 152nd Series, AMT, 5.75%, 11/01/30  | 3,300    | 3,602,643          |
| 152nd Series, AMT, 5.25%, 11/01/35  | 240      | 258,312            |
| 166th Series, 5.25%, 7/15/36  | 4,000    | 4,671,320          |
| 172nd Series, AMT, 5.00%, 10/01/34  | 1,500    | 1,700,790          |
|   |          | 94,938,194         |
| <b>Utilities 1.6%</b>   |          |                    |
| Rahway Valley Sewerage Authority, RB, CAB, Series A (NPFGC), 0.00%, 9/01/31 (d)           | 6,000    | 3,760,080          |
| <b>Total Municipal Bonds in New Jersey</b>  |          | <b>307,112,427</b> |
| <b>New York 0.1%</b>  |          |                    |
| <b>Transportation 0.1%</b>  |          |                    |
| Port Authority of New York & New Jersey, ARB, Consolidated, 169th Series, 5.00%, 10/15/41 | 250      | 276,735            |
| <b>Total Municipal Bonds 129.7%</b>   |          | <b>307,389,162</b> |

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

New Jersey 29.4%



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County/City/Special District/School District 6.0%

|   |        |            |
|---|--------|------------|
| County of Union New Jersey Utilities Authority, Refunding LRB, Resource Recovery Facility,<br>Covanta Union, Inc., Series A, AMT, 5.25%, 12/01/31 | 12,820 | 14,300,710 |
|---|--------|------------|

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## Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

| Municipal Bonds Transferred to  | Par      |                |
|---|----------|----------------|
| Tender Option Bond Trusts (f)   | (000)    | Value          |
| <b>New Jersey (continued)</b>   |          |                |
| <b>Education 0.9%</b>   |          |                |
| Rutgers - The State University of New Jersey, RB, Series F, 5.00%, 5/01/19 (c)                          | \$ 2,011 | \$ 2,256,707   |
| <b>State 7.1%</b>   |          |                |
| Garden State Preservation Trust, RB, Election of 2005, Series A (AGM), 5.75%, 11/01/28                  | 5,460    | 7,003,105      |
| New Jersey EDA, RB, School Facilities Construction (AGC):   |          |                |
| 6.00%, 12/15/18 (c)   | 1,185    | 1,344,325      |
| 6.00%, 12/15/34   | 2,415    | 2,741,369      |
| New Jersey EDA, Refunding RB, School Facilities Construction, 5.00%, 3/01/29 (e)                        | 5,230    | 5,634,753      |
|   |          | 16,723,552     |
| <b>Transportation 15.4%</b>   |          |                |
| New Jersey State Turnpike Authority, RB, Series A, 5.00%, 1/01/38 (e)                                   | 8,820    | 10,210,208     |
| New Jersey Transportation Trust Fund Authority, RB, Transportation System:                              |          |                |
| Series A (AMBAC), 5.00%, 12/15/32   | 4,100    | 4,297,497      |
| Series B, 5.25%, 6/15/36 (e)  | 5,001    | 5,384,191      |
| Port Authority of New York & New Jersey, RB, Consolidated, 169th Series, AMT, 5.00%, 10/15/41           | 11,257   | 12,460,508     |
| <b>Municipal Bonds Transferred to</b>   |          |                |
| <b>Tender Option Bond Trusts (f)</b>  |          |                |
| <b>New Jersey (continued)</b>   |          |                |
| <b>Transportation (continued)</b>   |          |                |
| Port Authority of New York & New Jersey, Refunding RB, Consolidated, 152nd Series, AMT, 5.25%, 11/01/35 | \$ 3,764 | \$ 4,050,858   |
|   |          | 36,403,262     |
| <b>Total Municipal Bonds Transferred to</b>   |          |                |
|   |          | 69,684,231     |
| <b>Tender Option Bond Trusts 29.4%</b>  |          |                |
| <b>Total Long-Term Investments</b>  |          |                |
| <b>(Cost \$344,883,399) 159.1%</b>  |          | 377,073,393    |
| <b>Short-Term Securities</b>  |          |                |
| <b>Shares</b>   |          |                |
| BIF New Jersey Municipal Money Fund, 0.00% (g)(h)   | 985,707  | 985,707        |
| <b>Total Short-Term Securities</b>  |          |                |
| <b>(Cost \$985,707) 0.4%</b>  |          | 985,707        |
| <b>Total Investments (Cost \$345,869,106*) 159.5%</b>   |          |                |
| <b>Other Assets Less Liabilities 0.3%</b>   |          | 711,621        |
| <b>Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (16.7)%</b>        |          | (39,591,220)   |
| <b>VRDP Shares, at Liquidation Value (43.1)%</b>  |          | (102,200,000)  |
| <b>Net Assets Applicable to Common Shares 100.0%</b>  |          | \$ 236,979,501 |

\* As of April 30, 2016, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

|                               |                |
|-------------------------------|----------------|
| Tax cost                      | \$ 306,976,405 |
| Gross unrealized appreciation | \$ 32,721,435  |
| Gross unrealized depreciation | (1,201,042)    |

Net unrealized appreciation

\$ 31,520,393

**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) When-issued security.
- (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) Zero-coupon bond.
- (e) 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.
- (f) Represent bonds transferred to a TOB Trust in exchange of cash and residual certificates received by the Fund. These bonds serve as collateral in a secured borrowing.

## Schedule of Investments (continued)

BlackRock MuniYield New Jersey Fund, Inc. (MYJ)

(g) During the period ended April 30, 2016, 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<br>at July 31,<br>2015 | Net<br>Activity | Shares Held<br>at April 30,<br>2016 | Income |
|-------------------------------------|------------------------------------|-----------------|-------------------------------------|--------|
| BIF New Jersey Municipal Money Fund | 3,887,295                          | (2,901,588)     | 985,707                             | \$ 250 |

(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    | Issue                      | Expiration | Notional<br>Value | Unrealized<br>Appreciation |
|--------------|----------------------------|------------|-------------------|----------------------------|
| Short        |                            |            |                   |                            |
| (5)          | 5-Year U.S. Treasury Note  | June 2016  | \$ 604,570        | \$ 2,103                   |
| (63)         | 10-Year U.S. Treasury Note | June 2016  | \$ 8,193,938      | 39,230                     |
| (23)         | Long U.S. Treasury Bond    | June 2016  | \$ 3,756,188      | 52,507                     |
| (3)          | Ultra U.S. Treasury Bond   | June 2016  | \$ 514,031        | 8,159                      |
| <b>Total</b> |                            |            |                   | <b>\$ 101,999</b>          |

## Portfolio Abbreviations

|              |   |
|--------------|---|
| <b>AGC</b>   | Assured Guarantee Corp.                 |
| <b>AGM</b>   | Assured Guaranty Municipal Corp.        |
| <b>AMBAC</b> | American Municipal Bond Assurance Corp. |
| <b>AMT</b>   | Alternative Minimum Tax (subject to)    |
| <b>ARB</b>   | Airport Revenue Bonds                   |
| <b>CAB</b>   | Capital Appreciation Bonds              |
| <b>COP</b>   | Certificates of Participation           |
| <b>EDA</b>   | Economic Development Authority          |
| <b>GO</b>    | General Obligation Bonds                |
| <b>LRB</b>   | Lease Revenue Bonds                     |
| <b>M/F</b>   | Multi-Family                            |
| <b>NPFGC</b> | National Public Finance Guarantee Corp. |
| <b>RB</b>    | Revenue Bonds                           |
| <b>S/F</b>   | Single-Family                           |

## 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 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 Fund has the ability to access

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

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

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

Changes in valuation techniques may result in transfers into or out of an assigned level within the hierarchy. In accordance with the Fund's policy, transfers between different levels of the fair value hierarchy are deemed to have occurred as of the beginning of the reporting period. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investments and derivative financial instruments and is not necessarily an indication of the risks associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and derivative financial instruments, refer to the Fund's most recent financial statements as contained in its semi-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          |
|------------------------------------|------------|----------------|---------|----------------|
| <b>Assets:</b>                     |            |                |         |                |
| Investments:                       |            |                |         |                |
| Long-Term Investments <sup>1</sup> |            | \$ 377,073,393 |         | \$ 377,073,393 |
| Short-Term Securities              | \$ 985,707 |                |         | 985,707        |
| <b>Total</b>                       | \$ 985,707 | \$ 377,073,393 |         | \$ 378,059,100 |

|   | Level 1    | Level 2 | Level 3 | Total      |
|---|------------|---------|---------|------------|
| <b>Derivative Financial Instruments<sup>2</sup></b> |            |         |         |            |
| <b>Assets:</b>                                      |            |         |         |            |
| Interest rate contracts                             | \$ 101,999 |         |         | \$ 101,999 |

<sup>1</sup> See above Schedule of Investments for values in each sector.

<sup>2</sup> Derivative financial instruments are futures contracts, which 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            |
|------------------------------------|------------|------------------|---------|------------------|
| <b>Assets:</b>                     |            |                  |         |                  |
| Cash pledged for futures contracts | \$ 180,150 |                  |         | \$ 180,150       |
| <b>Liabilities:</b>                |            |                  |         |                  |
| Bank overdraft                     |            | \$ (112,643)     |         | (112,643)        |
| TOB Trust Certificates             |            | (39,562,302)     |         | (39,562,302)     |
| VRDP Shares                        |            | (102,200,000)    |         | (102,200,000)    |
| <b>Total</b>                       | \$ 180,150 | \$ (141,874,945) |         | \$ (141,694,795) |

During the period ended April 30, 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: June 22, 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: June 22, 2016

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

BlackRock MuniYield New Jersey Fund, Inc.

Date: June 22, 2016